



**police, roads & transport**

Department of  
Police, Roads and Transport  
FREE STATE PROVINCE

# **FREE STATE DEPARTMENT OF POLICE, ROADS AND TRANSPORT**

**TENDER NO: PRT/BID22/2021/22**

**CONTRACT NUMBER C109/2021**

## **APPOINTMENT OF CONSTRUCTION COMPANY FOR SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

**CLOSING DATE: 13 DECEMBER 2021 AT 11:00AM**

**A CIDB GRADING MINIMUM: 8CEPE OR HIGHER**

### **VOLUME 1**

**Prepared for:**

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**NAME OF BIDDER**

**BID AMOUNT**

# LIST OF CONTRACT DOCUMENTS

The following documents form part of this contract:

**Volume 1:** The **GCC2015** - General Conditions of Contract for construction works, 3<sup>rd</sup> Edition 2015, issued by the South African Institute of Civil Engineering (see Note 1 below).

**Volume 2:** The **COTO** Standard Specifications for Road and Bridge Works for south African Road Authorities (Draft Standard October 2020), issued by the Committee of Land Transport Officials which the tenderer shall purchase himself / herself (see Note 2 below).

**Volume 3:** The South African Road Traffic Signs Manual (**SARTSM**) **regulation** for Road Signs and Road Marking.

**Volume 4:** The **Project Document**, containing the tender notice, Conditions of Tender, Tender Data, Returnable Schedules, general and particular conditions of contract, project specifications, Pricing Schedule, Form of offer and Site Information is issued by the Employer (see Note 3 below).

The Employer's Form of Acceptance and any correspondence from the selected tenderer, performance security-demand guarantee and all addenda issued during the period of tender will also form part of this volume once a successful tenderer has been appointed.

This volume also includes the Environmental Management Plan, Health and Safety Compliance and details of the Materials Investigation (if applicable).

## Notes to Tenderer:

**Note 1:** Volume 1 is obtainable from SAICE, Private Bag X200, Halfway House, 1685.  
Tel: (011) 8055947/8, e-mail: [civilinfo@saice.org.za](mailto:civilinfo@saice.org.za).

**Note 2:** Volume 2 is obtainable from SAICE, Private Bag X200, Halfway House, 1685.  
Tel: (011) 8055947/8, e-mail: [civilinfo@saice.org.za](mailto:civilinfo@saice.org.za).

**Note 3:** Volume 4 is issued at tender stage by the Head: Department of Police, Roads and Transport and contains the following files:

At Contract stage Volume 4 will be a bound signed paper copy containing the following documents:

- Returnable schedules relevant to the project
- Agreements and Contract Data
- Pricing Data
- Scope of Work
- Site Information

**Note 4:** Information provided by a tenderer over and above the above elements of volume 4 shall be treated as information only and will only be bound into the document if the tenderer notes on Form A4: Schedule of Variations or deviations that the information has a bearing on the tender price.

**Note 5:** For alternative offers the tenderer shall submit the following additional documentation, clearly marked as ALTERNATIVE, in a separate neatly bound file in the following order:

- Form of Offer and state “Alternative Form of Offer”;
- All returnable schedules applicable to alternative offer, as is appropriate;
- Alternative Pricing Schedule;
- Other relevant information.

# SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN

## CONTENTS

| <u>SECTION</u> | <u>DESCRIPTION</u>                                                                                                      | <u>PAGE</u> | <u>COLOUR</u> |
|----------------|-------------------------------------------------------------------------------------------------------------------------|-------------|---------------|
|                | FOREWORD                                                                                                                | (ii)        | White         |
|                | <u>THE TENDER</u>                                                                                                       |             |               |
| <b>PART T1</b> | <b>TENDERING PROCEDURES</b>                                                                                             | <b>T1-2</b> |               |
| T1.1           | TENDER NOTICE AND INVITATION TO TENDER                                                                                  | T1-3        | White         |
| T1.2           | STANDARD CONDITIONS OF TENDER                                                                                           | T1-4        | Pink          |
| T1.3           | TENDER DATA                                                                                                             | T1-14       | Pink          |
| <b>PART T2</b> | <b>RETURNABLE DOCUMENTS</b>                                                                                             | <b>T2-1</b> |               |
| T2.1           | LIST OF RETURNABLE DOCUMENTS                                                                                            | T2-2        | Yellow        |
| T2.2           | RETURNABLE SCHEDULES                                                                                                    | T2-3        | Yellow        |
| T2.2.1         | RETURNABLE SCHEDULES REQUIRED FOR TENDER<br>EVALUATION PURPOSES AND PREFERENTIAL<br>PROCUREMENT SCHEDULES AND AFFIDAVIT | T2-33       | Yellow        |
|                | <u>THE CONTRACT</u>                                                                                                     |             |               |
| <b>PART C1</b> | <b>AGREEMENT AND CONTRACT DATA</b>                                                                                      | <b>C1-1</b> |               |
| C1.1           | FORM OF OFFER AND ACCEPTANCE                                                                                            | C1-3        | Yellow        |
| C1.2           | CONTRACT DATA                                                                                                           | C1-5        | Yellow        |
| <b>PART C2</b> | <b>PRICING DATA</b>                                                                                                     | <b>C2-1</b> |               |
| C2.1           | PRICING INSTRUCTIONS                                                                                                    | C2-2        | Yellow        |
| C2.2           | BILL OF QUANTITIES                                                                                                      | C2-6        | Yellow        |
| <b>PART C3</b> | <b>SCOPE OF WORK</b>                                                                                                    | <b>C3-1</b> |               |
| C3.1           | STANDARD SPECIFICATIONS                                                                                                 | C3-2        | Blue          |
| C3.2           | PROJECT SPECIFICATIONS                                                                                                  | C3-4        | Blue          |
| C3.3           | PARTICULAR SPECIFICATIONS                                                                                               | C3-76       | Blue          |
| <b>PART C4</b> | <b>SITE INFORMATION</b>                                                                                                 | <b>C4-1</b> | C4.1          |
|                | LOCALITY PLAN                                                                                                           | C4-3        | Green         |

## FOREWORD

This document consists of two sections, namely the **TENDER** and the **CONTRACT**.

**THE TENDER** consists of two parts, namely :

- **T1 : Tendering Procedures** ..... Volume 1
- to be complied with by every Tenderer submitting a tender offer,
- and
- **T2 : Documents to be returned by the Tenderer** ..... Volume 1
- including the returnable schedules and forms to be completed by each Tenderer, some of which will eventually be incorporated into the contract between the successful Tenderer and the Employer.

**THE CONTRACT** consists of four parts, namely:

- **C1 : Agreements and Contract Data** ..... Volume 1
- **C2 : Pricing Data** ..... Volume 1
- 
- **C3 : Scope of Work** ..... Volume 1  
(Specifications and Project Specifications)
- and
- **C4 : Site Information** ..... Volume 1

# **SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

## **THE TENDER**

### **PART T1 : TENDERING PROCEDURES**

# PART T1: TENDERING PROCEDURES

## CONTENTS

| <b><u>SECTION</u></b> | <b><u>DESCRIPTION</u></b>              | <b><u>PAGE</u></b> |
|-----------------------|----------------------------------------|--------------------|
| T1.1                  | TENDER NOTICE AND INVITATION TO TENDER | T1-3               |
| T1.2                  | STANDARD CONDITIONS OF TENDER          | T1-4               |
| T1.3                  | TENDER DATA                            | T1-14              |

## **T1.1      TENDER NOTICE AND INVITATION TO TENDER**

T1.1.1 The Department of Police, Roads and Transport, Free State Provincial Government, invites tenders for **THE SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

T1.1.2 Tenderers should have a **CIDB** Contractor grading designation of **8CEPE** or higher.

T1.1.3 Tenderers must be registered with the **CIDB** in a **CE** class of construction works.

### **T1.1.4      Preferences**

The Tender will be subjected to **B-BBEE** preferential procurement policy framework as amended.

A minimum of 30% of the Contract Value **MUST** be sub-contracted to **local Contractors**.

Evaluation and Adjudication of bids: bid will be evaluated and adjudicated in terms of the Department of Police, Roads and Transport *Supply Chain Management Policy and Preferential Procurement Framework Act No. 5 of 2010*. *The 90/10 in preferential procurement points system as outlined in the bid document will apply. Preferential points will be given in terms of the Preferential Procurement Regulations, 2017.*

### **T1.1.5      Tender Documents**

- The tender documents will be given to the respective contractor's on the day of tender briefing

Queries relating to the issues of these documents may be addressed to:

Mr J G Seclave  
Cell no. 082 0599 705  
Fax no. 051 409 8683  
E-mail: [seclavej@freetrans.gov.za](mailto:seclavej@freetrans.gov.za)

T1.1.6 A compulsory clarification meeting with representatives of the Employer will take place at the **Naledi Roads Office in Dewetsdorp**, 65 Church Street, Monday, **06 December 2021 AT 17:00**

T1.1.7 The closing time, date and venue for receipt of tenders will be Monday, **13 DECEMBER 2021 AT 11:00AM** at the Perm building, Ground Floor, 45 Charlotte street, Bloemfontein **NO LATE TENDERS WILL BE ACCEPTED**.

T1.1.8 Telegraphic, telephonic, telex, facsimile and late tenders will not be accepted. Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

## **T1.2      STANDARD CONDITIONS OF TENDER**

The Conditions of Tender are the Standard Conditions of Tender as contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

### **F.1      GENERAL**

#### **F.1.1      Actions**

The Employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently.

#### **F.1.2      Tender documents**

The documents issued by the Employer for the purpose of a tender offer are listed in the Tender Data.

#### **F.1.3      Interpretation**

F.1.3.1      The Tender Data and additional requirements contained in the Tender Schedules, that are included in the returnable documents, are deemed to be part of these Conditions of Tender.

F.1.3.2      These Conditions of Tender, the Tender Data and Tender Schedules, which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

F.1.3.3      For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

- a)      **comparative offer** means the Tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other tendered parameters that will affect the value of the financial offer have been taken into consideration
- b)      **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the Employer or his staff or agents in the tender process; and
- c)      **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the Employer, including collusive practices intended to establish prices at artificial levels

#### **F.1.4      Communication and Employer's Agent**

Each communication between the Employer and a Tenderer shall be to or from the Employer's Agent only, and in a form that can be read, copied and recorded. Writing shall be in the English language.

The Employer shall not take any responsibility for non-receipt of communications from or by a Tenderer. The name and contact details of the Employer's Agent are stated in the Tender Data.

**F.1.5 The Employer's right to accept or reject any tender offer**

F.1.5.1 The Employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The Employer shall not accept or incur any liability to a Tenderer for such cancellation and rejection, but will give reasons for such action upon written request to do so.

F.1.5.2 The Employer may not, subsequent to the cancellation or abandonment of a tender process or the rejection of all tender offers, re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the Tenderer.

**F.2 TENDERER'S OBLIGATIONS**

**F.2.1 Eligibility**

Submit a tender offer only if the Tenderer complies with the criteria stated in the Tender Data and the Tenderer, or any of his principals, is not under any restriction to do business with Employer.

**F.2.2 Cost of tendering**

Accept that the Employer will not compensate the Tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

**F.2.3 Check documents**

Check the tender documents on receipt for completeness and notify the Employer of any discrepancy or omission.

**F.2.4 Confidentiality and copyright of documents**

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the Employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

**F.2.5 Reference documents**

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, Conditions of Contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

**F.2.6 Acknowledge addenda**

Acknowledge receipt of addenda to the tender documents, which the Employer may issue, and if necessary, apply for an extension to the closing time stated in the Tender Data, in order to take the addenda into account.

**F.2.7 Site visit and clarification meeting**

Attend, where required, a site visit and clarification meeting at which Tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the Tender Data.

**F.2.8 Seek clarification**

Request clarification of the tender documents, if necessary, by notifying the Employer at least five working days before the closing time stated in the Tender Data.

## **F.2.9 Insurance**

Be aware that the extent of insurance to be provided by the Employer (if any) may not be for the full cover required in terms of the Conditions of Contract identified in the Contract Data. The Tenderer is advised to seek qualified advice regarding insurance.

## **F.2.10 Pricing the tender offer**

F.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful Tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the Tender Data.

F.2.10.2 Show VAT payable by the Employer separately as an addition to the tendered total of the prices.

F.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the Conditions of Contract identified in the Contract Data.

F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the Tender Data. The Conditions of Contract identified in the Contract Data may provide for part payment in other currencies.

## **F.2.11 Alterations to documents**

Not make any alterations or additions to the tender documents, except to comply with instructions issued by the Employer, or necessary to correct errors made by the Tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

## **F.2.12 Alternative tender offers**

F.2.12.1 Submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the Tenderer proposes.

F.2.12.2 Accept that an alternative tender offer may be based only on the criteria stated in the Tender Data or criteria otherwise acceptable to the Employer.

## **F.2.13 Submitting a tender offer**

F.2.13.1 Submit a tender offer to provide the whole of the works, services or supply identified in the Scope of Work, unless stated otherwise in the Tender Data.

F.2.13.2 Return all returnable documents to the Employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.

F.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the Tender Data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the Employer.

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the Tender Data. The Employer will hold all authorized signatories liable on behalf of the Tenderer. Signatories for Tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the Employer shall hold liable for the purpose of the tender offer.

- F.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the Employer's address and identification details stated in the Tender Data, as well as the Tenderer's name and contact address.
- F.2.13.6 Where a two-envelope system is required in terms of the Tender Data, place and seal the returnable documents listed in the Tender Data in an envelope marked "Financial Proposal" and place the remaining returnable documents in an envelope marked "Technical Proposal". Each envelope shall state on the outside the Employer's address and identification details stated in the Tender Data, as well as the Tenderer's name and contact address.
- F.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the Employer's address and identification details as stated in the Tender Data.
- F.2.13.8 Accept that the Employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

**F.2.14 Information and data to be completed in all respects**

Accept that tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the Employer as non-responsive.

**F.2.15 Closing date and time**

- F.2.15.1 Ensure that the Employer receives the tender offer at the address specified in the Tender Data not later than the closing date and time stated in the Tender Data. Proof of posting shall not be accepted as proof of delivery. The Employer shall not accept tender offers submitted by telegraph, telex, facsimile or e-mail
- F.2.15.2 Accept that, if the Employer extends the closing date stated in the Tender Data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

**F.2.16 Tender offer validity**

- F.2.16.1 Hold the tender offer(s) valid for acceptance by the Employer at any time during the validity period stated in the Tender Data after the closing date stated in the Tender Data.
- F.2.16.2 If requested by the Employer, consider extending the validity period stated in the Tender Data for an agreed additional period.

**F.2.17 Clarification of tender offer after submission**

Provide clarification of a tender offer in response to a request to do so from the Employer during the evaluation of tender offers.

This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). **No change in the total of the prices or substance of the tender offer is sought, offered, or permitted.** The total of the prices stated by the Tenderer shall be binding upon the Tenderer.

**F.2.18 Provide other material**

- F.2.18.1 Provide, on request by the Employer, any other material that has a bearing on the tender offer, the Tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the Employer for the purpose of a full and fair risk assessment.

Should the Tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the Employer's request, the Employer may regard the tender offer as non-responsive.

**F.2.18.2** Dispose of samples of materials provided for evaluation by the Employer, where required.

**F.2.19 Inspections, tests and analysis**

Provide access during working hours to premises for inspections, tests and analysis as provided for in the Tender Data.

**F.2.20 Submit securities, bonds, policies, etc.**

If requested, submit for the Employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the Conditions of Contract identified in the Contract Data.

**F.2.21 Check final draft**

Check the final draft of the contract provided by the Employer within the time available for the Employer to issue the contract.

**F.2.22 Return of other tender documents**

If so instructed by the Employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the Tender Data.

**F.2.23 Certificates**

Include in the tender submission or provide the Employer with any certificates as stated in the Tender Data.

**F.3 THE EMPLOYER'S UNDERTAKINGS**

**F.3.1 Respond to clarification**

Respond to a request for clarification received up to five working days prior to the tender closing time stated in the Tender Data and notify all Tenderers who drew procurement documents.

**F.3.2 Issue addenda**

If necessary, issue addenda that may amend or amplify the tender documents to each Tenderer during the period from the date of the Tender Notice until seven days before the tender closing date stated in the Tender Data.

If, as a result a Tenderer applies for an extension to the closing date stated in the Tender Data, the Employer may grant such extension and, will then notify it to all Tenderers who drew documents.

**F.3.3 Return late tender offers**

Return tender offers received after the closing date or time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the Tenderer concerned.

**F.3.4 Opening of tender submissions**

**F.3.4.1** Unless the two-envelope system is to be followed, open valid tender submissions in the presence of Tenderers' agents who choose to attend at the time and place stated in the Tender

Data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

F.3.4.2 Announce at the opening held immediately after the opening of tender submissions, at a venue indicated in the Tender Data, the name of each Tenderer whose tender offer is opened, the total of his prices, preferences claimed and time for completion, if any, for the main tender offer only.

F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request.

### **F.3.5 Two-envelope system**

F.3.5.1 Where stated in the Tender Data that a two-envelope system is to be followed, open only the Technical Proposal of valid tenders in the presence of Tenderers' agents who choose to attend at the time and place stated in the Tender Data and announce the name of each Tenderer whose Technical Proposal is opened.

F.3.5.2 Evaluate the quality of the Technical Proposals offered by Tenderers, then advise Tenderers, who remain in contention for the award of the contract, of the time and place when the Financial Proposals will be opened. Open only the Financial Proposals of Tenderers, who score in the quality evaluation above the minimum number of points for quality stated in the Tender Data, and announce the score obtained for the Technical Proposals and the total price and any preferences claimed. Return unopened Financial Proposals to Tenderers whose Technical Proposals failed to achieve the minimum number of points for quality.

### **F.3.6 Non-disclosure**

Not disclose to Tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful Tenderer.

### **F.3.7 Grounds for rejection and disqualification**

Determine whether there has been any effort by a Tenderer to influence the processing of tender offers and instantly disqualify a Tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

### **F.3.8 Test for responsiveness**

F.3.8.1 Determine, on opening and before detailed evaluation, whether each tender offer properly received:

- a) meets the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

F.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) Detrimentially affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) Change the Employer's or the Tenderer's risks and responsibilities under the contract, or
- c) Affect the competitive position of other Tenderers presenting responsive tenders, if it were to be rectified.

F.3.8.3 Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

### **F.3.9 Arithmetical errors**

F.3.9.1 Check responsive tender offers for arithmetical errors, correcting them in the following manner:

- a) Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- b) If a Bill of Quantities (or Schedule of Quantities or Schedule of Rates) applies and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected.
- c) Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate will be corrected.
- d) **Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the Tenderer's addition of prices, the total of the prices shall govern and the Tenderer will be asked to revise selected item prices (and their rates if a Bill of Quantities applies) to achieve the tendered total of the prices.**

F.3.9.2 Consider the rejection of a tender offer if the Tenderer does not correct or accept the correction of his arithmetical errors in the manner described above.

### **F.3.10 Clarification of a tender offer**

Obtain clarification from a Tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

### F.3.11 Evaluation of tender offers

#### F.3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate it using the tender evaluation method that is indicated in the Tender Data and described below:

|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Method 1 :</b><br>Financial offer<br><b>(N/A)</b>                          | <ol style="list-style-type: none"><li>1) Rank tender offers from the most favourable to the least favourable comparative offer.</li><li>2) Recommend highest ranked Tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Method 2:</b><br><b>Financial Offer and preferences</b>                    | <ol style="list-style-type: none"><li>1) <b>Confirm that Tenderers are eligible for the preferences claimed and if so, score tender evaluation points for preferencing.</b></li><li>2) <b>Calculate total tender evaluation points.</b></li><li>3) <b>Rank tender offers from the highest number of tender evaluation points to the lowest.</b></li><li>4) <b>Recommend Tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.</b></li></ol>                                                                                                                                                                                  |
| <b>Method 3 :</b><br>Financial offer and quality<br><b>(N/A)</b>              | <ol style="list-style-type: none"><li>1) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender Data.</li><li>2) Score tender evaluation points for financial offer.</li><li>3) Calculate total tender evaluation points.</li><li>4) Rank tender offers from the highest number of tender evaluation points to the lowest.</li><li>5) Recommend Tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.</li></ol>                                                                                                                                         |
| <b>Method 4 :</b><br>Financial offer, quality and preferences<br><b>(N/A)</b> | <ol style="list-style-type: none"><li>1) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender Data.</li><li>2) Score tender evaluation points for financial offer.</li><li>3) Confirm that Tenderers are eligible for the preferences claimed, and if so, score tender evaluation points for preferencing.</li><li>4) Calculate total tender evaluation points.</li><li>5) Rank tender offers from the highest number of tender evaluation points to the lowest.</li><li>6) Recommend Tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.</li></ol> |

Score financial offers, preferences and quality, as relevant, to two decimal places.

#### F.3.11.2 Scoring financial offers

Score the financial offers of remaining responsive tender offers using the following formula:

$N_{FO} = W_1 \times A$  where:

$N_{FO}$  = the number of tender evaluation points awarded for the financial offer.

$W_1$  = the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.

$A$  = a number calculated using either formulas 1 or 2 below as stated in the Tender Data.

| Formula | Basis for comparison                      | Option 1                      | Option 2 |
|---------|-------------------------------------------|-------------------------------|----------|
| 1       | Highest price or discount                 | $(1 + \frac{(P - P_m)}{P_m})$ | $P/P_m$  |
| 2       | Lowest price or percentage commission/fee | $(1 - \frac{(P - P_m)}{P_m})$ | $P_m/P$  |

Where:

P<sub>m</sub> = the comparative offer of the most favourable tender offer.

P = the comparative offer of tender offer under consideration.

#### F.3.11.3 **Scoring quality (functionality)**

Score quality in each of the categories stated in the Tender Data and calculate total score for quality.

#### F.3.12 **Insurance provided by the Employer**

If requested by the proposed successful Tenderer, submit for the Tenderer's information the policies and / or certificates of insurance which the Conditions of Contract identified in the Contract Data, require the Employer to provide.

#### F.3.13 **Acceptance of tender offer**

F.3.13.1 Accept tender offer only if the Tenderer satisfies the legal requirements stated in the Tender Data.

F.3.13.2 Notify the successful Tenderer of the Employer's acceptance of his tender offer by completing and returning one copy of the Form of Offer and Acceptance before the expiry of the validity period stated in the Tender Data, or agreed additional period. Providing the Form of Offer and Acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the Employer and the successful Tenderer as described in the Form of Offer and Acceptance.

#### F.3.14 **Notice to unsuccessful Tenderers**

After the successful Tenderer has acknowledged the Employer's notice of acceptance, notify other Tenderers that their tender offers have not been accepted.

#### F.3.15 **Prepare contract documents**

If necessary, revise documents that shall form part of the contract and that were issued by the Employer as part of the tender documents to take account of :

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents,
- c) other revisions agreed between the Employer and the successful Tenderer, and
- d) the Schedule of Deviations attached to the Form of Offer and Acceptance, if any.

#### F.3.16 **Issue final contract**

Prepare and issue the final draft of contract documents to the successful Tenderer for acceptance as soon as possible after the date of the Employer's signing of the Form of Offer and Acceptance (including the Schedule of Deviations, if any).

Only those documents that the conditions of tender require the Tenderer to submit, after acceptance by the Employer, shall be included.

**F.3.17 Complete adjudicator's contract**

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

**F.3.18 Provide copies of the contract**

Provide to the successful Tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the Form of Offer and Acceptance.

## **T1.3      TENDER DATA**

### **T1.3.1      GENERAL**

The Conditions of Tender in Section T1.2 are the Standard Conditions of Tender as contained in Annex F of SANS 294 – *Construction Procurement Processes, Methods and Procedures* which contain references to the Tender Data for details that apply specifically to this tender. The Tender Data in this Section T.1.3 shall be read with the Standard Conditions of Tender in order to expand on the Tenderer's obligations and the Employer's undertakings in administering the tender process in respect of the project under consideration. The Tender Data hereafter shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender. Each item of Tender Data given below is cross-referenced to the relevant clause in the Standard Conditions of Tender.

### **T1.3.2      TENDER DATA APPLICABLE TO THIS TENDER**

#### **Clause number**

#### **Wording**

#### **F1.          GENERAL**

#### **F.1.2      Tender documents**

The tender documents issued by the Employer comprise of:

#### **a)   VOLUME 1 : PROJECT DOCUMENT**

**This volume is the Project Document for the identified contract number C109/2021 and contains the following sections:**

#### **THE TENDER**

#### **PART T1:                      TENDERING PROCEDURES**

|      |                                        |
|------|----------------------------------------|
| T1.1 | TENDER NOTICE AND INVITATION TO TENDER |
| T1.2 | STANDARD CONDITIONS OF TENDER          |
| T1.3 | TENDER DATA                            |

#### **PART T2:                      RETURNABLE DOCUMENTS**

|      |                              |
|------|------------------------------|
| T2.1 | LIST OF RETURNABLE DOCUMENTS |
| T2.2 | RETURNABLE SCHEDULES         |

#### **THE CONTRACT**

#### **PART C1:   AGREEMENTS AND CONTRACT DATA**

|      |                              |
|------|------------------------------|
| C1.1 | FORM OF OFFER AND ACCEPTANCE |
| C1.2 | CONTRACT DATA                |

#### **PART C2:   PRICING DATA**

|      |                      |
|------|----------------------|
| C2.1 | PRICING INSTRUCTIONS |
| C2.2 | BILL OF QUANTITIES   |

## **PART C3: SCOPE OF WORK**

- C3.1 STANDARD SPECIFICATIONS
- C3.2 PROJECT SPECIFICATIONS
- C3.3 PARTICULAR SPECIFICATIONS

## **PART C4: SITE INFORMATION**

### **c) VOLUME 2: BOOK OF DRAWINGS**

**There is no Volume 2 - Book of Drawings for C109/2021.**

The following documents also form part of the tender and contract, but must be purchased by each of the Tenderers themselves:

- d) VOLUME 3: *General Conditions of Contract for construction works, 3rd edition 2015***, issued by the South African Institute of Civil Engineering.
- e) VOLUME 4: *The COTO Standard Specifications for Road and Bridge Works for south African Road Authorities (Draft Standard October 2020)***, issued by the **Committee of Land Transport Officials**.
- f) *The Occupational Health and Safety Act 18<sup>th</sup> Edition of Construction Regulations GNR.929 of 25 June 2014***. This document is obtainable separately, and Tenderers shall obtain their own copies.
- g)** In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations and standards referred to in this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies and participation of targeted enterprises and labour.
  - (i) The Construction Industry Development Board Act No 38 of 2000 and the Regulations in terms of the CIDB Act 38/2000, Government Notice No 692 of 9 June 2004, and amendments
  - (ii) SANS 10396:2003 Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures
  - (iii) SANS 1914:2003 Targeted Construction Procurement, Parts 1 to 6, dealing with Participation of Targeted Enterprises, Joint Ventures, Targeted Labour etc.

The Project Document and the drawings shall be obtained from the Employer or his authorized representative at the physical address stated in the Tender Notice, upon payment of the deposit stated in the Tender Notice.

  - (iv) Asphalt Academy May 2009 publication "TG2 Second Edition, Technical guideline: Bitumen Stabilised Materials".

### **F.1.4 Communication and Employer's Agent**

The Employer's Agent: Mr W Van Wyk

Address : Medfontein Building 303, St. Andrew Street, BLOEMFONTEIN.  
Tel no : 051 409 8687  
Fax no : 051 409 8683  
e-mail : **vanwykw@freetrans.gov.za**

The Employer's agent representative as per GCC 2015 is JG Seclave

Address : Medfontein Building Room 319, 153 St. Andrew Street, BLOEMFONTEIN.  
Cell no : 082 0599 705  
Fax no : 051 409 8683  
e-mail : SeclaveJ@freetrans.gov.za

## **F2.1 Eligibility**

F2.1.1 Only those Tenderers who have in their employ management and supervisory staff satisfying the requirements of the Scope of Work for labour intensive competencies for supervisory and management staff are eligible to submit tenders. NQF Level 5 will be a minimum requirement for supervisors.

F2.1.2 The following Tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to submit tenders:

- a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for **8CEPE** class of construction work; and
- b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above
- c) Tenderers need to ensure that they are registered in the grading in which they tender if their tender price differs from the grading as specified

F2.1.3 Joint Ventures are eligible to submit tenders provided that:

- a) every member of the joint venture is registered with the CIDB;
- b) the lead partner has a contractor grading designation in the **8CEPE** class of construction work; or
- c) the combined contractor grading designation calculated in accordance with the Construction Industry Development Board Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **8CEPE** class of construction work.

## **F2.7 Site visit and clarification meeting**

The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.

### **NOTE : NON-ATTENDANCE OF THIS MEETING WILL DISQUALIFY THE TENDER**

- (a) The Attendance List will be accepted as the official attendance of the clarification meeting. Signing the Attendance List of this meeting is the responsibility of the Tenderer attending the meeting and site inspection.

It is important for prospective Tenderers to note that the name of the company on the Attendance List will be accepted as the legitimate Tenderer, which was represented by the person who signed the Attendance List.

- (b) Addenda of additional or changed contractual information will only be forwarded to Tenderers who attended the official site visit and clarification meeting.

## **F2.12. Alternative tender offers**

Should a Tenderer wish to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.

Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.

Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the Tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.

The modified Pricing Data must include an amount equal to 0% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.

## **F2.13 Submitting a tender offer**

F2.13.5 Tender offers shall be submitted as an original only.

### **F2.13.7 The Employer's address:**

The Head  
Department of Police, Roads and Transport  
P O Box 690  
Room 226  
Medfontein Building  
St Andrew Street  
BLOEMFONTEIN  
9300

**Location of tender box** : As stated

**Identification details** : **Contract no: C109/2021**

**Description of project : SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

## **F2.15 Closing time**

The closing date for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.

## **F2.16 Tender offer validity**

The tender offer validity period is 180 **calendar** days from the closing date for submission of tenders.

## **F2.18 Provide other material**

The Tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive

portion of the works with satisfactory evidence that such staff members satisfy the eligibility requirements.

## **F2.23 Certificates**

The following certificates need to be included in the Tender:

- a) A valid Tax Clearance Certificate for the Tenderer or for each of the JV partners if tendered in a Joint Venture, issued by the South African Revenue Services;
- b) The Tenderer's CIDB Registration Certificate or the Joint Venture's members' CIDB Registration Certificates with an indication of the senior partner.

## **F3.4 Opening of tender submissions**

Tender submissions will be opened at 45 Charlotte Maxeke Street, Room 219, Perm Building.

## **F3.5 Two-envelope system**

The two-envelope system will not be followed for this contract.

## **F3.11 Evaluation of tender offers**

F3.11.1 Due to the nature of the tendering process, with negotiated rates, the tenders will be evaluated and the rates balanced to suit the particular Contractor's circumstance.

### **F3.11.2 Scoring quality**

No points will be allocated to scoring of quality.

## **F3.13 Acceptance of tender offer**

### **F3.13.1 Tender offers will only be accepted if:**

- a) the tender offer is signed by a person authorized to sign on behalf of the Tenderer;
- b) the Tenderer submitted an original valid Tax Clearance Certificate issued by the South African Revenue Services;
- c) Tenderer's declaration of compliance with the Occupational Health and Safety Act No 85 of 1993 and the Construction Regulations 2014 is included with his tender submission;
- d) a Tenderer who submitted a tender as a Joint Venture has included an acceptable Joint Venture Agreement with his tender;
- e) the Tenderer or a competent authorized representative of the contractor who submitted the tender has attended the compulsory clarification meeting or site inspection;
- f) the Tenderer included with its tender the contractor's CIDB Registration Certificate (or certified copy thereof) as proof that it is registered in accordance with the Construction Industry Development Board Act No. 38 of 2000 and the Regulations 2003 promulgated in terms of the Act;
- g) the Tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and
- h) the Tenderer has not:
  - i) abused the Employer's Supply Chain Management System; or

- ii) failed to perform on any previous contract and has been given a written notice to this effect
- i) has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Tenderer's ability to perform the contract in the best interests of the Employer or potentially compromise the tender process.

**F3.18 Provide copies of the contract**

The Employer will provide the successful Tenderer, now the Contractor, with one copy of the complete, signed contract document.

# **SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

## **PART T2 : RETURNABLE DOCUMENTS**

### **CONTENTS**

| <b><u>SECTION</u></b> | <b><u>DESCRIPTION</u></b>                                                              | <b><u>PAGE</u></b> |
|-----------------------|----------------------------------------------------------------------------------------|--------------------|
| T2.1                  | LIST OF RETURNABLE DOCUMENTS                                                           | T2-2               |
| T2.2                  | RETURNABLE SCHEDULES                                                                   | T2-3               |
|                       | T2.2.1 RETURNABLE AND PREFERENTIAL SCHEDULES<br>REQUIRED FOR TENDEREVALUATION PURPOSES | T2-3               |
|                       | T2.2.2 PREFERENTIAL PROCUREMENT SCHEDULES<br>AND AFFIDAVIT                             | T2-25              |
|                       | T2.2.3 FORMS TO BE SUBMITTED BY SUCCESSFUL TENDERER                                    | T2-36              |

## **T2.1      LIST OF RETURNABLE DOCUMENTS**

The Tender Document must be submitted as a whole. All forms must be properly completed as required, and the document shall not be taken apart or altered in any way whatsoever.

All the certificates and forms to be provided with the tender are listed in the Tender Data under F2.23: Certificates, and under the returnable schedules and forms in T2.2 hereafter.

The list of returnable documents comprises the following :

1. All the certificates listed in the Tender Data under F2.23 : Certificates ;
2. All the returnable schedules and forms listed in T2.2.1 : Returnable Schedules Required for Tender Evaluation Purposes ;
3. All the returnable documents listed in T2.2.2 : Preferential Procurement Schedules and Affidavits that will be incorporated into the Contract ;
4. All the agreements and forms listed in T2.2.3: Forms to be completed by the successful Tenderer ;
5. All the forms and agreements in the Contract Data in C1.2, where some of the forms (agreements) need to be completed only by successful Tenderer ;
6. Pricing Data in C2.2 : Bill of Quantities.

## **T2.2      RETURNABLE SCHEDULES**

### **T2.2.1      RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES**

| <b><u>SECTION</u></b> | <b><u>DESCRIPTION</u></b>                                                                | <b><u>PAGE</u></b> |
|-----------------------|------------------------------------------------------------------------------------------|--------------------|
| SCHEDULE A            | CERTIFICATE OF AUTHORITY .....                                                           | T2-5               |
| SCHEDULE B            | COMPULSORY ENTERPRISE QUESTIONNAIRE .....                                                | T2-9               |
| SCHEDULE C            | PROPOSED SUBCONTRACTORS.....                                                             | T2-12              |
| SCHEDULE D            | TENDERER'S KEY PERSONNEL .....                                                           | T2-14              |
| SCHEDULE E            | PRELIMINARY PROGRAMME .....                                                              | T2-16              |
| SCHEDULE F            | AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES.....                                         | T2-18              |
| SCHEDULE G            | TENDERER'S HEALTH AND SAFETY PLAN AND DECLARATION                                        | T2-20              |
| SCHEDULE H            | INVITATION TO BID.....                                                                   | T2-24              |
| SCHEDULE I            | TAX CLEARANCE CERTIFICATE/S .....                                                        | T2-27              |
| SCHEDULE J            | DECLARATION OF INTEREST.....                                                             | T2-29              |
| SCHEDULE K            | PREFERENCIAL PROCUREMENT REGULATIONS 2017.....                                           | T2-33              |
| SCHEDULE L            | DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND<br>CONTENT FOR DESIGNATED SECTORS ..... | T2-38              |
| SCHEDULE M            | DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT<br>PRACTICES.....                   | T2-42              |
| SCHEDULE N            | CERTIFICATE OF INDEPENDENT BID DETERMINATION.....                                        | T2-44              |

**T2.2.2 PREFERENTIAL PROCUREMENT SCHEDULES AND AFFIDAVITS THAT  
WILL BE INCORPORATED INTO THE CONTRACT**

T2-25

**T2.2.3 FORMS TO BE SUBMITTED BY THE SUCCESSFUL TENDERER**

T2-36

NOTE : The Tenderer is required to complete each and every schedule and form listed above to the best of his ability, as the evaluation of tenders and the eventual contract will be based on the information provided by the Tenderer.

Failure of a Tenderer to complete the schedules and forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection on the grounds that the tender is not responsive.

The same applies to the Preferential Procurement Schedule in T2.2.2.

## **SCHEDULE A : CERTIFICATE OF AUTHORITY**

Indicate the status of the Tenderer by ticking the appropriate box hereunder. The Tenderer must complete the certificate set out below for the relevant category.

| <b>(i)<br/>COMPANY</b> | <b>(ii)<br/>CLOSE<br/>CORPORATION</b> | <b>(iii)<br/>PARTNERSHIP</b> | <b>(iv)<br/>JOINT<br/>VENTURE</b> | <b>(v)<br/>SOLE<br/>PROPRIETOR</b> |
|------------------------|---------------------------------------|------------------------------|-----------------------------------|------------------------------------|
|                        |                                       |                              |                                   |                                    |

### **(i) CERTIFICATE FOR COMPANY**

I, ....., Managing Director of the Board of Directors of ....., hereby confirm that by resolution of the Board (copy attached) taken on ..... 20....., Mr/Ms ....., acting in the capacity of ....., was authorized to sign all documents in connection with this tender and any contract resulting from it, on behalf of the company.

**Managing Director :** .....

### **(ii) CERTIFICATE FOR CLOSE CORPORATION**

We, the undersigned, being the key members in the business trading as ..... hereby authorise Mr/Ms ..... , acting in the capacity of ....., to sign all documents in connection with this tender ..... and any contract resulting from it, on our behalf.

| <b>NAME</b> | <b>ADDRESS</b> | <b>SIGNATURE</b> | <b>DATE</b> |
|-------------|----------------|------------------|-------------|
|             |                |                  |             |
|             |                |                  |             |
|             |                |                  |             |
|             |                |                  |             |
|             |                |                  |             |
|             |                |                  |             |

***Note : This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.***

(iii) CERTIFICATE FOR PARTNERSHIP

We, the undersigned, being the key partners in the business trading as,  
.....  
..... hereby authorize Mr/Ms  
.....  
acting in the capacity of ....., to sign all  
documents in  
connection with this tender and any contract resulting from it, on our behalf.

| NAME | ADDRESS | SIGNATURE | DATE |
|------|---------|-----------|------|
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |

**Note : This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.**

(iv) CERTIFICATE FOR JOINT VENTURE

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize Mr/Ms ....., authorized signatory of the company ....., acting in the capacity of lead partner, to sign all documents in connection with this tender offer and any contract resulting from it, on our behalf.

This authorization is evidenced by the attached power of attorney signed by legally authorized signatories of all the partners to the Joint Venture.

| NAME OF FIRM | ADDRESS | AUTHORIZING SIGNATURE, NAME AND CAPACITY |
|--------------|---------|------------------------------------------|
| Lead partner |         |                                          |
|              |         |                                          |
|              |         |                                          |
|              |         |                                          |
|              |         |                                          |

**Note : This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.**

(v) CERTIFICATE FOR SOLE PROPRIETOR

I, ....., hereby confirm that I am the sole owner  
of the  
business trading as

.....

**Signature** of sole owner : .....

**REGISTRATION CERTIFICATE / AGREEMENT / ID DOCUMENT**

***Important note to Tenderer :***

***Registration Certificates for Companies, Close Corporations and Partnerships, or Agreements and Powers of Attorney for Joint Ventures, or ID documents for Sole Proprietors, all as referred to in the foregoing forms and in T2.1, must be attached here.***

## **SCHEDULE B : COMPULSORY ENTERPRISE QUESTIONNAIRE**

The following particulars must be furnished. In the case of a Joint Venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

**Section 1 : Name of enterprise :**

**Section 2 : VAT registration number :**

**Section 3 : CIDB registration number :**

**Section 4 : Particulars of sole proprietors and partners in partnerships :**

| <b>Name*</b> | <b>Identity number*</b> | <b>Personal income tax number*</b> |
|--------------|-------------------------|------------------------------------|
|              |                         |                                    |
|              |                         |                                    |
|              |                         |                                    |

\* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

### **Section 5 : Particulars of companies and close corporations**

Company registration number . . . . .

Close corporation number . . . . .

Tax reference number . . . . .

### **Section 6 : Record of service of the state**

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months, in the service of any of the following:

- |                                                                                                |                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> a member of any municipal council                                     | <input type="checkbox"/> an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) |
| <input type="checkbox"/> a member of any provincial legislature                                | <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity                                                                                                            |
| <input type="checkbox"/> a member of the National Assembly or the National Council of Province | <input type="checkbox"/> an employee of Parliament or a provincial legislature                                                                                                                                      |
| <input type="checkbox"/> a member of the board of directors of any municipal entity            |                                                                                                                                                                                                                     |
| <input type="checkbox"/> an official of any municipality or municipal entity                   |                                                                                                                                                                                                                     |

If any of the above boxes are marked, disclose the following :

| Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder | Name of institution, public office, board or organ of state and position held | Status of service (tick appropriate column) |                       |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------|-----------------------|
|                                                                                           |                                                                               | Current                                     | Within last 12 months |
|                                                                                           |                                                                               |                                             |                       |
|                                                                                           |                                                                               |                                             |                       |
|                                                                                           |                                                                               |                                             |                       |
|                                                                                           |                                                                               |                                             |                       |

Note : Insert separate page if necessary

#### Section 7 : Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months, been in the service of any of the following:

- |                                                                                                |                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> a member of any municipal council                                     | <input type="checkbox"/> an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) |
| <input type="checkbox"/> a member of any provincial legislature                                |                                                                                                                                                                                                                     |
| <input type="checkbox"/> a member of the National Assembly or the National Council of Province |                                                                                                                                                                                                                     |
| <input type="checkbox"/> a member of the board of directors of any municipal entity            | <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity                                                                                                            |
| <input type="checkbox"/> an official of any municipality or municipal entity                   | <input type="checkbox"/> an employee of Parliament or a provincial legislature                                                                                                                                      |

If any of the above boxes are marked, disclose the following :

| Name of spouse, child or parent | Name of institution, public office, board or organ of state and position held | Status of service (tick appropriate column) |                       |
|---------------------------------|-------------------------------------------------------------------------------|---------------------------------------------|-----------------------|
|                                 |                                                                               | current                                     | Within last 12 months |
|                                 |                                                                               |                                             |                       |
|                                 |                                                                               |                                             |                       |
|                                 |                                                                               |                                             |                       |

Note : Insert separate page if necessary

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the enterprise :

- i) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- ii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iii) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Position \_\_\_\_\_

Enterprise  
name \_\_\_\_\_

**SCHEDULE C: PROPOSED SUBCONTRACTORS**

I/We hereby notify you that it is my/our intention to employ the following subcontractors for work in this contract.

If I/we am/are awarded a contract I/we agree that this notification does not change the requirement for me/us to submit the names of proposed subcontractors in accordance with requirements of the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

**a) Subcontractors: CIDB grading 5CE to 7CE**

| <b>NAMES OF PROPOSED SUBCONTRACTORS</b> | <b>NATURE AND EXTENT OF WORK TO BE SUBCONTRACTED</b> | <b>CIDB GRADING</b> | <b>AMOUNT</b> |
|-----------------------------------------|------------------------------------------------------|---------------------|---------------|
|                                         |                                                      |                     |               |
|                                         |                                                      |                     |               |
|                                         |                                                      |                     |               |
|                                         |                                                      |                     |               |
|                                         |                                                      |                     |               |
|                                         |                                                      |                     |               |

**b) Subcontractors: CIDB grading 1CE to 4CE and unregistered ABE's if available**

| <b>NAMES OF PROPOSED SUBCONTRACTORS</b> | <b>NATURE AND EXTENT OF WORK TO BE SUBCONTRACTED</b> | <b>CIDB GRADING</b> | <b>AMOUNT</b> |
|-----------------------------------------|------------------------------------------------------|---------------------|---------------|
|                                         |                                                      |                     |               |
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|                                         |                                                      |                     |               |

SIGNATURE : .....

**ATTACH PRE-TENDER AGREEMENTS HERE**

**SCHEDULE D: TENDERERS' KEY PERSONNEL**

| NAME | POSITION | NQF QUALIFICATION |
|------|----------|-------------------|
|      |          |                   |
|      |          |                   |
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SIGNATURE : .....

**ATTACH COPIES OF NQF CERTIFICATES FOR LABOUR INTENSIVE CONSTRUCTION OF  
RELEVANT SUPERVISORS**

## SCHEDULE E: PRELIMINARY PROGRAMME

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this Contract. The programme shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of his Tender.

### PROGRAMME

| ACTIVITY | MONTHS |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|
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*[Note: The programme must be based on the completion time as specified in the Contract Data. No other completion time that may be indicated on this programme will be regarded as an alternative offer, unless it is listed in Table (b) of Form I hereafter and supported by a detailed statement to that effect, all as specified in the Tender Data]*

SIGNATURE : .....

**ATTACH PRELIMINARY PROGRAM HERE**

## **SCHEDULE F : AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES**

The Tenderer should record any amendments and alternatives he may wish to make to the tender documents in this schedule. Alternatively, a Tenderer may state such amendments and alternatives in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause F3.3 if the Standard Conditions of Tender referenced in the Tender Data regarding the Employer's handling of material deviations and qualifications.

These amendments and qualifications, if accepted by the Employer, will be incorporated in the Form of Offer and Acceptance, Schedule of Deviations.

### **(a) AMENDMENTS AND QUALIFICATIONS**

| <b>PAGE</b> | <b>CLAUSE OR ITEM NO</b> | <b>PROPOSED AMENDMENT AND QUALIFICATIONS</b> |
|-------------|--------------------------|----------------------------------------------|
|             |                          |                                              |
|             |                          |                                              |
|             |                          |                                              |
|             |                          |                                              |
|             |                          |                                              |
|             |                          |                                              |

**[Notes: (1) Amendments to the General and Special Conditions of Contract are not acceptable;**

**(2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.**

### **(b) ALTERNATIVES**

| <b>PROPOSED ALTERNATIVE</b> | <b>DESCRIPTION OF ALTERNATIVE</b> |
|-----------------------------|-----------------------------------|
|                             |                                   |
|                             |                                   |
|                             |                                   |
|                             |                                   |

**[Notes: (1) Individual alternative items that do not justify an alternative tender, and an alternative offer for time for completion should be listed here.**

**(2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.**

**(3) Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.]**

**SIGNATURE : .....**

**ATTACH ALTERNATIVES HERE**

## **SCHEDULE G: CONTRACTOR'S HEALTH AND SAFETY PLAN AND DECLARATION**

In terms of Clause 4(4) of the OHS 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHS 1993 Construction Regulations 2014.

To that effect a person duly authorized by the Tenderer must complete and sign the declaration hereafter in detail.

### **Declaration by Tenderer**

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHS 1993 Construction Regulations 2003.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 5(1) of the Construction Regulations, which plan shall be subject to approval by the Employer.
4. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHS 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
5. I hereby confirm that adequate provision has been made in my tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHS 1993 Construction Regulations 2014, including the cost for specific items that may be scheduled in the Bill of Quantities.
6. I hereby confirm that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations for failure on my part to comply with the provisions of the Act and the Regulations as set out in Regulation 30 of the Regulations.
7. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHS 1993 Construction Regulations 2014, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.
8. I am aware of the fact that, should I be awarded the contract, I must submit the notification required in terms of Regulation 3 of the OHS 1993 Construction Regulations 2014 before I will be allowed to proceed with any work under the contract.

SIGNATURE : .....

## **CONTRACTOR'S SAFETY PLAN**

The Tenderer shall attach to this page (or submit it separately) the Contractor's Health and Safety Plan as required in terms of Regulation 5 of the Occupational Health and Safety Act 1993 Construction Regulations 2014, and referred to in Form K.

The Contractor's Health and Safety Plan shall cover at least the following aspects as applicable:

1. Safety of subcontractors (Refer Construction Regulations 2014 Clause 5: Principal Contractors and Contractors)
  - Methods to ensure the approval, implementation and maintenance of all health and safety aspects regarding his subcontractors.
2. Monitoring the health and safety on the construction site on a regular basis (Refer Clause 6: Supervision of Construction Work)
  - Details of the Construction Supervisor and his appointed assistants (if any);
  - Details of the Construction Safety Officer, full-time or part-time;
  - Details of the suitability and competency of the Construction Supervisor and Construction Safety Officer regarding health and safety aspects of the construction works.
3. Assessment of risks on the construction site (Refer Clause 7: Risk Assessment)
  - Details of a proper risk assessment on which his health and safety plan is based;
  - Ways in which all construction employees are informed, instructed and trained regarding the work procedures and the related hazards.
4. Risk items (Refer Clauses 8 to 28: Risk items to be addressed)
  - Details of the design, management, responsibilities, worker training, work methods, procedures, maintenance and any other requirements necessary for him and his subcontractor, if applicable, to work safely and in a healthy environment as stipulated in these clauses.

## Contractor's OHS Management System checklist

### 1. OHS Policy and Management

|     |                                                                                    | Yes | No |
|-----|------------------------------------------------------------------------------------|-----|----|
| 1.1 | Is there a written company health and safety policy?                               |     |    |
| 1.2 | Does the company have an OHS Management System?                                    |     |    |
| 1.3 | Is there a company OHS Management Manual or Plan?                                  |     |    |
| 1.4 | Are health and safety responsibilities clearly identified for all levels of staff? |     |    |

### 2. Safe Work Practices and Procedures

|     |                                                                                                                    | Yes | No |
|-----|--------------------------------------------------------------------------------------------------------------------|-----|----|
| 2.1 | Has the company prepared safe operating procedures or specific safety instructions relevant to its operations?     |     |    |
| 2.2 | Does the company have any permit to work systems?                                                                  |     |    |
| 2.3 | Is there a documented incident investigation procedure?                                                            |     |    |
| 2.4 | Are there procedures for maintaining, inspecting and assessing the hazards of plant operated/owned by the company? |     |    |
| 2.5 | Are there procedures for storing and handling hazardous substances?                                                |     |    |
| 2.6 | Are there procedures for identifying, assessing and controlling risks associated with manual handling?             |     |    |

### 3. OHS Training

|     |                                                                                                        | Yes | No |
|-----|--------------------------------------------------------------------------------------------------------|-----|----|
| 3.1 | Is health and safety training conducted in the company?                                                |     |    |
| 3.2 | Is a record maintained of all training and induction programs undertaken for employees in the company? |     |    |

### 4. Health and Safety Workplace Inspection.

|     |                                                                                             | Yes | No |
|-----|---------------------------------------------------------------------------------------------|-----|----|
| 4.1 | Are regular health and safety inspections at worksites undertaken?                          |     |    |
| 4.2 | Are standard workplace inspection checklists used to conduct health and safety inspections? |     |    |
| 4.3 | Is there a procedure by which employees can report hazards at workplaces?                   |     |    |

### 5. Health and Safety Consultation.

|     |                                                               | Yes | No |
|-----|---------------------------------------------------------------|-----|----|
| 5.1 | Is there a workplace health and safety committee?             |     |    |
| 5.2 | Are employees involved in decision making over OHS matters?   |     |    |
| 5.3 | Are there employee elected health and safety representatives? |     |    |

6. **OHS Performance Monitoring.**

|     |                                                                                             | Yes | No |
|-----|---------------------------------------------------------------------------------------------|-----|----|
| 6.1 | Is there a system for recording and analyzing health and safety performance statistics?     |     |    |
| 6.2 | Are employees regularly provided with information on company health and safety performance? |     |    |
| 6.3 | Has the company ever been convicted of an occupational health and safety offence?           |     |    |

7. **Does your company's health and safety plan contain the following elements?**

|      |                                                                                         | Yes | No |
|------|-----------------------------------------------------------------------------------------|-----|----|
| 7.1  | Description of the contract                                                             |     |    |
| 7.2  | OHS Structure of work undertaken under this contract                                    |     |    |
| 7.3  | Induction and safety training                                                           |     |    |
| 7.4  | Safe work practices and procedures for specific work undertaken                         |     |    |
| 7.5  | Risk assessments for specific works undertaken                                          |     |    |
| 7.6  | Workplace inspection schedule for duration of contract                                  |     |    |
| 7.7  | OHS consultative processes to be followed                                               |     |    |
| 7.8  | Emergency procedure for this specific contract                                          |     |    |
| 7.9  | Incident recording and investigation on procedures                                      |     |    |
| 7.10 | Health and safety performance monitoring arrangements to be implemented during contract |     |    |
| 7.11 | Management of Covid-19 protocols                                                        |     |    |

**SCHEDULE H****PART A  
INVITATION TO BID****SBD1**

|                                                                                                                                                                       |                                                                                      |               |                                                |                               |                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------|------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------|
| <b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)</b>                                                                      |                                                                                      |               |                                                |                               |                                                                                       |
| BID NUMBER:                                                                                                                                                           |                                                                                      | CLOSING DATE: |                                                | CLOSING TIME:                 |                                                                                       |
| DESCRIPTION                                                                                                                                                           |                                                                                      |               |                                                |                               |                                                                                       |
| <b>BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)</b>                                                                            |                                                                                      |               |                                                |                               |                                                                                       |
|                                                                                                                                                                       |                                                                                      |               |                                                |                               |                                                                                       |
|                                                                                                                                                                       |                                                                                      |               |                                                |                               |                                                                                       |
|                                                                                                                                                                       |                                                                                      |               |                                                |                               |                                                                                       |
| <b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO</b>                                                                                                                 |                                                                                      |               | <b>TECHNICAL ENQUIRIES MAY BE DIRECTED TO:</b> |                               |                                                                                       |
| CONTACT PERSON                                                                                                                                                        |                                                                                      |               | CONTACT PERSON                                 |                               |                                                                                       |
| TELEPHONE NUMBER                                                                                                                                                      |                                                                                      |               | TELEPHONE NUMBER                               |                               |                                                                                       |
| FACSIMILE NUMBER                                                                                                                                                      |                                                                                      |               | FACSIMILE NUMBER                               |                               |                                                                                       |
| E-MAIL ADDRESS                                                                                                                                                        |                                                                                      |               | E-MAIL ADDRESS                                 |                               |                                                                                       |
| <b>SUPPLIER INFORMATION</b>                                                                                                                                           |                                                                                      |               |                                                |                               |                                                                                       |
| NAME OF BIDDER                                                                                                                                                        |                                                                                      |               |                                                |                               |                                                                                       |
| POSTAL ADDRESS                                                                                                                                                        |                                                                                      |               |                                                |                               |                                                                                       |
| STREET ADDRESS                                                                                                                                                        |                                                                                      |               |                                                |                               |                                                                                       |
| TELEPHONE NUMBER                                                                                                                                                      | CODE                                                                                 |               | NUMBER                                         |                               |                                                                                       |
| CELLPHONE NUMBER                                                                                                                                                      |                                                                                      |               |                                                |                               |                                                                                       |
| FACSIMILE NUMBER                                                                                                                                                      | CODE                                                                                 |               | NUMBER                                         |                               |                                                                                       |
| E-MAIL ADDRESS                                                                                                                                                        |                                                                                      |               |                                                |                               |                                                                                       |
| VAT REGISTRATION NUMBER                                                                                                                                               |                                                                                      |               |                                                |                               |                                                                                       |
| SUPPLIER COMPLIANCE STATUS                                                                                                                                            | TAX COMPLIANCE SYSTEM PIN:                                                           |               | <b>OR</b>                                      | CENTRAL SUPPLIER DATABASE No: | MAAA                                                                                  |
| B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE                                                                                                                          | TICK APPLICABLE BOX]<br><br><input type="checkbox"/> Yes <input type="checkbox"/> No |               | B-BBEE STATUS LEVEL SWORN AFFIDAVIT            |                               | [TICK APPLICABLE BOX]<br><br><input type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES &amp; QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]</b> |                                                                                      |               |                                                |                               |                                                                                       |

|                                                                                                                                                                                                                            |                                                                                    |                                                                                   |                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                            | <input type="checkbox"/> Yes <input type="checkbox"/> No<br>[IF YES ENCLOSE PROOF] | ARE YOU A FOREIGN BASED<br>SUPPLIER FOR THE GOODS<br>/SERVICES /WORKS<br>OFFERED? | <input type="checkbox"/> Yes <input type="checkbox"/> No<br>[IF YES, ANSWER THE<br>QUESTIONNAIRE BELOW<br>] |
| <b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>                                                                                                                                                                          |                                                                                    |                                                                                   |                                                                                                             |
| IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? <input type="checkbox"/> YES<br><input type="checkbox"/> NO                                                                                                |                                                                                    |                                                                                   |                                                                                                             |
| DOES THE ENTITY HAVE A BRANCH IN THE RSA? <input type="checkbox"/> YES<br><input type="checkbox"/> NO                                                                                                                      |                                                                                    |                                                                                   |                                                                                                             |
| DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?<br><input type="checkbox"/> YES <input type="checkbox"/> NO                                                                                                     |                                                                                    |                                                                                   |                                                                                                             |
| DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? <input type="checkbox"/><br>YES <input type="checkbox"/> NO                                                                                                          |                                                                                    |                                                                                   |                                                                                                             |
| IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? <input type="checkbox"/> YES<br><input type="checkbox"/> NO                                                                                                      |                                                                                    |                                                                                   |                                                                                                             |
| <b>IF THE ANSWER IS “NO” TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.</b> |                                                                                    |                                                                                   |                                                                                                             |

## PART B

### TERMS AND CONDITIONS FOR BIDDING

|                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. BID SUBMISSION:</b>                                                                                                                                                                                                                      |
| 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.                                                                                                                   |
| 1.2. <b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.</b>                                                                                                    |
| 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT. |
| 1.4. <b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).</b>                                                                                                                                         |
| <b>2. TAX COMPLIANCE REQUIREMENTS</b>                                                                                                                                                                                                          |
| 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.                                                                                                                                                                                 |
| 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.                                                              |
| 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.                                                                                                                         |
| 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.                                                                                                                                                                   |
| 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.                                                                                             |
| 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.                                                                                                          |
| 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."                        |

**NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....  
(Proof of authority must be submitted e.g. company resolution)

DATE: .....

## **SCHEDULE I : TAX CLEARANCE REQUIREMENTS**

## **SBD 2**

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

1. In order to meet his requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
2. SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
3. The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
4. In bids where Consortia / Joint Venture / Sub-contractors are involved; each party must submit a separate Tax Clearance Certificate.
5. Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website [www.sars.gov.za](http://www.sars.gov.za).
6. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website [www.sars.gov.za](http://www.sars.gov.za).

**II. APPLICATION FOR TAX CLEARANCE CERTIFICATE  
(IN RESPECT OF BIDDERS)**

- Signature of contact person requiring Tax Clearance Certificate: .....

Telephone number :                      Code:.....      Number: .....

DATE: 20...../...../.....

**PLEASE NOTE THAT THE COMMISSIONER FOR THE SOUTH AFRICAN REVENUE SERVICE (SARS) WILL NOT EXERCISE HIS DISCRETIONARY POWERS IN FAVOUR OF ANY PERSON WITH REGARD TO ANY INTEREST, PENALTIES AND / OR ADDITIONAL TAX LEVIABLE DUE TO THE LATE OR UNDER PAYMENT OF TAXES, DUTIES OR LEVIES OR THE RENDITION RETURNS BY ANY PERSON AS A RESULT OF ANY SYSTEM NOT BEING YEAR 2000 COMPLIANT**

## SCHEDULE J: DECLARATION OF INTEREST

SBD 4

1. Any legal person, including persons employed by the state<sup>1</sup>, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

2.1 Full Name of bidder or his or her representative: .....

2.2 Identity Number: .....

2.3 Position occupied in the Company (director, trustee, shareholder<sup>2</sup>, member): .....

.....

2.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:

.....

2.5 Tax Reference Number: .....

2.6 VAT Registration Number: .....

2.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / PERSAL numbers must be indicated in paragraph 3 below.

<sup>1</sup>"State" means –

- (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

<sup>2</sup>"Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

2.7 Are you or any person connected with the bidder presently employed by the state? **YES / NO**

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member: .....  
Name of state institution at which you or the person  
connected to the bidder is employed : .....

Position occupied in the state institution: .....

Any other particulars: .....

.....

.....

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? **YES / NO**

2.7.2.1 If yes, did you attach proof of such authority to the bid document? **YES / NO**

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.2.2 If no, furnish reasons for non-submission of such proof:

.....

.....

.....

2.8 Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months? **YES / NO**

2.8.1 If so, furnish particulars:

.....

.....

.....

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

2.9.1 If so, furnish particulars.

.....

.....

.....

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?

**YES/NO**

2.10.1 If so, furnish particulars.

.....

.....

.....

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract?

**YES/NO**

2.11.1 If so, furnish particulars:

.....

.....

.....

**3 Full details of directors / trustees / members / shareholders.**

| Full Name | Identity Number | Personal Tax Number | Income Reference | State Number / Number | Employee / Persal |
|-----------|-----------------|---------------------|------------------|-----------------------|-------------------|
|           |                 |                     |                  |                       |                   |
|           |                 |                     |                  |                       |                   |
|           |                 |                     |                  |                       |                   |
|           |                 |                     |                  |                       |                   |
|           |                 |                     |                  |                       |                   |
|           |                 |                     |                  |                       |                   |

4 **DECLARATION**

I, THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 AND 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bidder

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL  
PROCUREMENT REGULATIONS 2017**

**a)**

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.**

**1. GENERAL CONDITIONS**

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

**B)** The value of this bid is estimated to exceed R50 000 000 (all applicable taxes included) and therefore the 90/10 preference point system shall be applicable; or

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

|                                                          | <b>POINTS</b> |
|----------------------------------------------------------|---------------|
| <b>PRICE</b>                                             |               |
| <b>B-BBEE STATUS LEVEL OF CONTRIBUTOR</b>                |               |
| <b>Total points for Price and B-BBEE must not exceed</b> | <b>100</b>    |

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

**2. DEFINITIONS**

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;

- |    |                                                                  |        |       |
|----|------------------------------------------------------------------|--------|-------|
| 1) | Status level certificate issued by an authorized body or person; | B-BBEE |       |
| 2) | affidavit as prescribed by the B-BBEE Codes of Good Practice;    | A      | sworn |
| 3) | requirement prescribed in terms of the B-BBEE Act;               | Any    | other |

- 4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

| B-BBEE Status Level of Contributor | Number of points (90/10 system) | Number of points (80/20 system) |
|------------------------------------|---------------------------------|---------------------------------|
| 1                                  | 10                              | 20                              |
| 2                                  | 9                               | 18                              |
| 3                                  | 6                               | 14                              |
| 4                                  | 5                               | 12                              |
| 5                                  | 4                               | 8                               |
| 6                                  | 3                               | 6                               |
| 7                                  | 2                               | 4                               |
| 8                                  | 1                               | 2                               |
| Non-compliant contributor          | 0                               | 0                               |

## 5. BID DECLARATION

- 5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

## 6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

- 6.1 B-BBEE Status Level of Contributor: . = .....(maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

## 7. SUB-CONTRACTING

- 7.1 Will any portion of the contract be sub-contracted?

(***Tick applicable box***)

|     |                          |    |                          |
|-----|--------------------------|----|--------------------------|
| YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
|-----|--------------------------|----|--------------------------|

- 7.1.1 If yes, indicate:

- What percentage of the contract will be subcontracted.....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- Whether the sub-contractor is an EME or QSE

(***Tick applicable box***)

|     |                          |    |                          |
|-----|--------------------------|----|--------------------------|
| YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
|-----|--------------------------|----|--------------------------|

- v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

| <b>Designated Group: An EME or QSE which is at last 51% owned by:</b> | <b>EME</b><br>√ | <b>QSE</b><br>√ |
|-----------------------------------------------------------------------|-----------------|-----------------|
| Black people                                                          |                 |                 |
| Black people who are youth                                            |                 |                 |
| Black people who are women                                            |                 |                 |
| Black people with disabilities                                        |                 |                 |
| Black people living in rural or underdeveloped areas or townships     |                 |                 |
| Cooperative owned by black people                                     |                 |                 |
| Black people who are military veterans                                |                 |                 |
| <b>OR</b>                                                             |                 |                 |
| Any EME                                                               |                 |                 |
| Any QSE                                                               |                 |                 |

**8. DECLARATION WITH REGARD TO COMPANY/FIRM**

8.1 Name \_\_\_\_\_ of  
company/firm:.....

8.2 VAT \_\_\_\_\_ registration  
number:.....

8.3 Company \_\_\_\_\_ registration  
number:.....

**8.4 TYPE OF COMPANY/ FIRM**

- ☐ Partnership/Joint Venture / Consortium
  - ☐ One person business/sole propriety
  - ☐ Close corporation
  - ☐ Company
  - ☐ (Pty) Limited
- [TICK APPLICABLE BOX]

**8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES**

.....  
.....  
.....  
.....  
.....

8.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 Total number of years the company/firm has been in business:.....

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificates, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
  - (a) disqualify the person from the bidding process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution.

WITNESSES

- 1. ....
- 2. ....

.....  
SIGNATURE(S) OF BIDDERS(S)

DATE: .....

ADDRESS .....

.....

.....

## DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

### 1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

- x is the imported content in Rand  
y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

**The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.**

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

**2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:**

| <u>Description of services, works or goods</u> | <u>Stipulated minimum threshold</u> |
|------------------------------------------------|-------------------------------------|
| _____                                          | _____ %                             |
| _____                                          | _____ %                             |
| _____                                          | _____ %                             |

**3. Does any portion of the goods or services offered have any imported content?**

*(Tick applicable box)*

|     |  |    |  |
|-----|--|----|--|
| YES |  | NO |  |
|-----|--|----|--|

**3..1** If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on [www.resbank.co.za](http://www.resbank.co.za)

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

| <b>Currency</b> | <b>Rates of exchange</b> |
|-----------------|--------------------------|
| US Dollar       |                          |
| Pound Sterling  |                          |
| Euro            |                          |
| Yen             |                          |
| Other           |                          |

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

**4.** Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

**LOCAL CONTENT DECLARATION**  
**(REFER TO ANNEX B OF SATS 1286:2011)**

**LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)**

**IN RESPECT OF BID NO. ....**

**ISSUED BY:** (Procurement Authority / Name of Institution):  
.....

NB

1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on [http://www.thedti.gov.za/industrial\\_development/ip.jsp](http://www.thedti.gov.za/industrial_development/ip.jsp). Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, ..... (full names),  
do hereby declare, in my capacity as .....  
of .....(name of bidder  
entity), the following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have satisfied myself that:

(i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and

(c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

|                                                                    |   |
|--------------------------------------------------------------------|---|
| Bid price, excluding VAT (y)                                       | R |
| Imported content (x), as calculated in terms of SATS 1286:2011     | R |
| Stipulated minimum threshold for local content (paragraph 3 above) |   |
| Local content %, as calculated in terms of SATS 1286:2011          |   |

**If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.**

**The local content percentages for each product has been calculated using the**

**formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.**

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

**SIGNATURE:** \_\_\_\_\_

**WITNESS No. 1** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**WITNESS No. 2** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**SCHEDULE M : DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES** **SBD8**

- 1 This Standard Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be disregarded if that bidder, or any of its directors have-
  - a. abused the institution's supply chain management system;
  - b. committed fraud or any other improper conduct in relation to such system; or
  - c. failed to perform on any previous contract.
- 4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

| Item  | Question                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes                             | No                             |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------|
| 4.1   | Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?<br><br><i>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the audi alteram partem rule was applied).</i><br><br><b>The Database of Restricted Suppliers now resides on the National Treasury's website(<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) and can be accessed by clicking on its link at the bottom of the home page.</b> | Yes<br><input type="checkbox"/> | No<br><input type="checkbox"/> |
| 4.1.1 | If so, furnish particulars:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |                                |
| 4.2   | Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?<br><b>The Register for Tender Defaulters can be accessed on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) by clicking on its link at the bottom of the home page.</b>                                                                                                                                                                                                                                                                               | Yes<br><input type="checkbox"/> | No<br><input type="checkbox"/> |
| 4.2.1 | If so, furnish particulars:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |                                |
| 4.3   | Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Yes<br><input type="checkbox"/> | No<br><input type="checkbox"/> |
| 4.3.1 | If so, furnish particulars:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |                                |

|       |                                                                                                                                                                   |                                 |                                |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------|
| 4.4   | Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract? | Yes<br><input type="checkbox"/> | No<br><input type="checkbox"/> |
| 4.4.1 | If so, furnish particulars:                                                                                                                                       |                                 |                                |

**CERTIFICATION**

I, \_\_\_\_\_ THE \_\_\_\_\_ UNDERSIGNED \_\_\_\_\_ (FULL NAME).....

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

1. This Standard Bidding Document (SBD) must form part of all bids<sup>1</sup> invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).<sup>2</sup> Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
  - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
  - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
4. This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

<sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>2</sup> Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

## **CERTIFICATE OF INDEPENDENT BID DETERMINATION**

I, the undersigned, in submitting the accompanying bid:

---

(Bid Number and Description)

in response to the invitation for the bid made by:

---

(Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of : \_\_\_\_\_  
that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
  - (a) has been requested to submit a bid in response to this bid invitation;
  - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
  - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium<sup>3</sup> will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - (a) prices;

- (b) geographical area where product or service will be rendered (market allocation)
- (c) methods, factors or formulas used to calculate prices;
- (d) the intention or decision to submit or not to submit, a bid;
- (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
- (f) bidding with the intention not to win the bid.

8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

**<sup>3</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.**

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

**ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:**

**Department**                      **Department of Police, Roads and Transport**

**Contact Person:**              Mr W van Wyk

**Tel:**                                051 409 8687

**Fax:**                                051 409 8683

**E-mail address:**              [vanwykw@freetrans.gov.za](mailto:vanwykw@freetrans.gov.za)

**ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:**

**Department:**                      **Department of Police, Roads and Transport**

**Contact Person:**              Mr JG Seclave

**Tel:**                                051 409 8578

**Fax:**                                051 409 8683

**E-mail address:**              SeclaveJ@freetrans.gov.za

# **SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

## **THE CONTRACT**

**PART C1 : AGREEMENTS AND CONTRACT DATA**

**PART C2 : PRICING DATA**

## **PART C1 : AGREEMENTS AND CONTRACT DATA**

### **CONTENTS**

| <b><u>SECTION</u></b> | <b><u>DESCRIPTION</u></b>    | <b><u>PAGE</u></b> |
|-----------------------|------------------------------|--------------------|
| C1.1                  | FORM OF OFFER AND ACCEPTANCE | C1-3               |
| C1.2                  | CONTRACT DATA                | C1-7               |

## **C1.1 Form of Offer and Acceptance**

### **OFFER**

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

#### **SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1 BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

The Bidder, identified in the Offer signature block below, has examined the documents listed in the Bid Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Bid.

By the representative of the Bidder, deemed to be duly authorized, signing this part of this Form of Offer and Acceptance, the Bidder offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

#### **THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:**

.....  
Rand (in words);

R .....  
(in figures)

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Bidder before the end of the period of validity stated in the Bid Data, whereupon the Bidder becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

For the Bidder

.....  
Signature

.....  
Name

.....  
Capacity

Name and address of organization .....

.....  
Signature and Name of Witness .....  
Signature

.....  
Name

Date: .....

## ACCEPTANCE

**By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Bidder's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Bidder's Offer shall form an agreement between the Employer and the Bidder upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.**

The terms of the contract, are contained in:

Part C1: Agreements and Contract Data, (which includes this Agreement)  
Part C2: Pricing Data  
Part C3: Scope of Work.  
Part C4: Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the Bid Data and any addenda thereto as listed in the Bid Schedules as well as any changes to the terms of the Offer agreed by the Bidder and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Bidder shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Bidder receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Bidder (now Contractor) within five days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

For the Employer:

.....

Signature

.....

Name

.....

Capacity

Name and address of organisation: .....

.....

.....

Signature and name of witness:.....

Signature

.....

Name

Date: .....

### Schedule of Deviations

#### Notes:

1. The extent of deviations from the Bid documents issued by the Employer prior to the Bid closing date is limited to those permitted in terms of the Conditions of Bid,
2. A Bidder's covering letter shall not be included in the final contract document. Should any matter in such, letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of, offer and acceptance, the outcome of such agreement shall be recorded here,
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to Bid documents and which it is agreed by the Parties becomes and obligation of the contract shall also be recorded here,
4. Any change or addition to the Bid documents arising from the above agreements and recorded here, shall also be incorporated into final draft or the Contract,

1. Subject .....

Details .....

2. Subject .....

Details .....

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Bidder agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Bid Data and addenda thereto as listed in the Bid Schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the Bid documents and the receipt by the Bidder of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Bidder:

For the Employer:

.....

Signature

.....

.....

Name

.....

|                                   |                                   |       |
|-----------------------------------|-----------------------------------|-------|
| .....                             | Capacity                          | ..... |
| Name and address of organisation: | Name and address of organisation: |       |
| .....                             |                                   | ..... |
| .....                             |                                   | ..... |
| .....                             |                                   | ..... |
| .....                             | Witness Signature                 | ..... |
| .....                             | Witness Name                      | ..... |
| .....                             | Date                              | ..... |

Confirmation of Receipt

The Bidder, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including Schedule of Deviations (if any) today:

the .....(day)

of .....(month)

20 .....(year)

at .....(place)

For the Contractor: .....

Signature

.....

Name

.....

Capacity

Signature and name of witness:

.....

Signature

.....

Name

## **C1.2 CONTRACT DATA**

### **CONTENTS**

| <b><u>SECTION</u></b> | <b><u>DESCRIPTION</u></b>     | <b><u>PAGE</u></b> |
|-----------------------|-------------------------------|--------------------|
| C1.2.1                | CONDITIONS OF CONTRACT        | C1-6               |
| C1.2.2                | CONTRACT SPECIFIC DATA        | C1-8               |
| C1.2.3                | DATA PROVIDED BY THE TENDERER | C1-13              |

## **C1.2.1      CONDITIONS OF CONTRACT**

### **GENERAL CONDITIONS OF CONTRACT**

This Contract will be based on the "General Conditions of Contract for Construction Works – 2<sup>ND</sup> Edition 2015", issued by the South African Institution of Civil Engineering. (Short title: "General Conditions of Contract 2015").

It is agreed that the only variations from the General Conditions of Contract 2015 are those set out hereafter under "Contract Specific Conditions".

### **CONTRACT SPECIFIC CONDITIONS**

#### **1.            GENERAL**

These Contract Specific Conditions (CSC) form an integral part of the Contract. The Contract Specific Conditions shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2015 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions hereafter are numbered "CSC" followed in each case by the number of the applicable clause or subclause in the General Conditions of Contract 2015, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the General Conditions, and an appropriate heading.

#### **2.            AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT**

##### **CSC 2.3    Specific Approval of the Employer required**

*"The Engineer or Contractor must obtain special approval or consent from the Employer for the decisions in the following clauses:*

*Clauses 2.2.3, 3.1.2, 3.2.1, 3.2.4, 4.7, 4.12.1, 4.11.2, 5.7.3, 5.8.1, 5.10.1, 5.11.2, 5.11.3, 5.12.1, 5.13.2, 5.14.1, 5.16.1, 6.3.2, 6.4, 6.5.1, 6.6.1, 6.10.1, 6.10.6, 6.11, 7.8.2.2, 8.2.2.2, 10.1.5."*

#### **3.1           Add the following**

*"after approval by the Employer"*

##### **CSC 2.1.2 Compliance with applicable laws**

##### **CSC 2.1.2.5    Health and safety**

*Add the following :*

*"The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations GNR.929 of 25 June 2003 (Government Gazette No 25207 of 18 July 2003, Notice No R1010) will in all respects be applicable to this contract."*

## **CSC CONTRACT PRICE ADJUSTMENT SCHEDULE**

### **Paragraph 1**

*Adjust the definitions of "L", "P", "M" and "F" in the 4th to the 7th sub-paragraphs with the following :*

#### Definition of "L" :

*Insert "(Consumer Price Index)" after "P0141.1" in the third line.*

*Insert "(Consumer Price Index and Percentage Change according to Urban Area)" after "Table 21" in the third line.*

#### Definition of "P" :

*Insert "(Production Price Index)" after "P0142.1" in the second line.*

*Insert "(Production Price Index for Selected Materials, item 'Civil Engineering Plant')"* after "Table 16" in the second line.

#### Definition of "M" :

*Insert "(Production Price Index)" after "P0142.1" in the second line*

*Insert "(Production Price Index for Materials used in Certain Industries, item 'Civil Engineering Plant')"* after "Table 15" in the second line

#### Definition of "F" :

*Insert "(Production Price Index)" after "P0142.1" in the second line*

*Insert "(Production Price Index for Selected Materials, item Diesel Oil – Coast and Witwatersrand)" after "Table 16" in the second line*

*[Note: The indices are obtainable in [www.statssa.gov.za](http://www.statssa.gov.za). The latest indices for L (certain urban areas only), P, M and F, are more readily obtainable in [www.safcec.org.za](http://www.safcec.org.za) under "CPAF Indices"] upon registration with Safcec*

### **Paragraph 2 : Assessment of amount subject to adjustment**

*Add the following to the paragraph defining "E" :*

"Where the amount is based on current costs de-escalated to the base month, or where daywork is calculated at rates tendered in a daywork schedule, the costs shall not be included in the value of "E".

### **SCC 55.1 Termination by employer**

*Add the following clause:*

CSC55.1.10 If the contractor is found guilty of contravening the EPWP Code of Good conduct or the EPWP Disciplinary Code.

**C1.2.2      CONTRACT SPECIFIC DATA**

| <b>REFERENCE TO:</b>            | <b>CLAUSE</b> | <b>INFORMATION</b>                                                                                                                                                                                                                                                                                                    |
|---------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contractor                      | 1.1.1.9       | .....                                                                                                                                                                                                                                                                                                                 |
| Defects Liability Period        | 1.1.1.13      | 24 Months from issuing of Certificate of Practical Completion per section of road completed. Meaning 24 months from the issue of the Certificate of Completion having been issued for different parts of the Works, during which the Contractor has both the right and obligation make good defects in the materials. |
| Latent Defects Liability Period | 5.16.3        | Should there be any defects within Fifteen (15) years after final completion, the Contractor will be fully liable for latent defects                                                                                                                                                                                  |
| Practical Completion            | 1.1.1.14      | The time for achieving Practical Completion is calculated from commencement date, excluding year end breaks.                                                                                                                                                                                                          |
| Employer                        | 1.1.1.15      | <b>Department of Police, Roads and Transport</b>                                                                                                                                                                                                                                                                      |
| Engineer                        | 1.1.1.16      | <b>Department of Police, Roads and Transport</b>                                                                                                                                                                                                                                                                      |
| Address of the Employer         | 1.2.1.2       | Perm Building, 45 Charlotte Maxeke Street, Bloemfontein                                                                                                                                                                                                                                                               |
| Address of the Contractor       | 1.2.1.2       | Physical Address:<br>.....<br>Postal Address:<br>.....<br>Telephone Number (Office):<br>.....<br>Facsimile Number (Office):<br>.....<br>E-mail Address (Office):<br>.....                                                                                                                                             |

|                                                                            |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Commencement of Work                                                       | 5.2       | Within 14 days after issuing of the appointment letter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Documentation required before commencement of the Works                    | 5.3.1     | Health & Safety Plan (Refer to Clause 4.3)<br>Revised Programme & Cash flow Projection (Refer to Clause 5.6)<br>Security (Refer to Clause 6.2)<br>Insurance (Refer to Clause 8.6)                                                                                                                                                                                                                                                                                                                                                                           |
| Time to submit the documentation required before commencement of the Works | 5.3.2     | 14 Days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Special non-working days                                                   |           | Sundays and all public holidays as well as year-end breaks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Programme of Works                                                         | 5.6.1     | Within 14 days of Commencement Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Non-working days                                                           | 5.8.1     | Sundays and all public holidays as well as year-end breaks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Penalty for failing to complete the Works on time                          | 5.13.1    | <b>R10,000</b> per calendar day                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Security                                                                   | 6.2.1     | Performance Guarantee of 10% of the value of the Works which will be handed back after practical completion.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Day work percentages                                                       | 6.5.1.2.3 | Refer to section 1800 of the Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Contract Price Adjustment                                                  | 6.8.2     | <p>The following values for the different factors are to be used:</p> <p>X = 0.10</p> <p>a = 0.10 - Labour</p> <p>b = 0.55 - Equipment</p> <p>c = 0.15 - Material</p> <p>d = 0.20 - Fuel</p> <p>The different values for the calculation of the price adjustment factor shall be for the area of Free State: Other urban areas. The Diesel index shall be for the Witwatersrand Area.</p> <p>The Base month is one month prior to submission of quotations.</p> <p><b>Only applicable for contract duration of more 12 months of commencement date.</b></p> |

|                            |          |                                                                                                                                                                                                                                                                                                                             |
|----------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Special Materials          | 6.8.3    | Special materials shall be limited to bitumen and bituminous products.                                                                                                                                                                                                                                                      |
| Materials on Site          | 6.10.1.5 | 80% payment for materials on site                                                                                                                                                                                                                                                                                           |
| Retention Money            | 6.10.3   | 10% of contract amount                                                                                                                                                                                                                                                                                                      |
| Retention Money            | 6.10.3   | Two retention Guarantees of 50% each of the value of the retention money are compulsory as part of site establishment obligations; one will be handed back after practical completion and the other <b>24 months</b> after practical completion.<br><br>There will be no retention monies deducted on interim certificates. |
| Contract Guarantee         |          | Must be submitted within 14 days of Commencement Date                                                                                                                                                                                                                                                                       |
| Guarantee Sum              |          | 10% of Contract Value                                                                                                                                                                                                                                                                                                       |
| Insurances                 | 8.6      | As per contract value                                                                                                                                                                                                                                                                                                       |
|                            |          | R0-00                                                                                                                                                                                                                                                                                                                       |
| Limited of indemnity       | 8.6.1.3  | R5,000,000-00 per claim, number of claims unlimited                                                                                                                                                                                                                                                                         |
| Other Insurances           | 8.6.1.5  | R0-00                                                                                                                                                                                                                                                                                                                       |
| Dispute Resolution         | 10.5.1   | Adjudication                                                                                                                                                                                                                                                                                                                |
| Adjudication Board Members | 10.5.3   | Only Three members required                                                                                                                                                                                                                                                                                                 |
| Dispute Resolution         | 10.7.1   | Adjudication<br><br>If there are no agreements, then court proceeding will be preferred.                                                                                                                                                                                                                                    |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Targeted Subcontractors (ABE's) | <p>Part C3: Scope of Works: C3.7.1.2 (3.1) - 30% of Contract Value (Excl Contingencies) must be subcontracted to Local &amp; CDP Contractors approved / appointed by the Department and the Works should only be executed by Subcontractors and should be paid within 30 days as per Section B of BOQ.</p> <p><b>CPA will only be applicable for contracts longer than 12 months.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Targeted Local labour           | <ol style="list-style-type: none"> <li>1. Minimum Labour Employment per R 1 Million - 4 for Conventional &amp; 12 for EPWP of Contract Value (Excl. VAT, Contingencies and CPA) should be appointed with a minimum of six months at a payment rate of <b>R166/day</b>.</li> <li>2. 25% of labour must be retained for the entire duration of the contract.</li> <li>3. Recruitment of annual labour target shall be as follows: <ul style="list-style-type: none"> <li>• 30% - at the beginning of the financial year</li> <li>• 30% - three months after the initial appointment</li> <li>• 40% - at midway into the financial year</li> </ul> </li> <li>4. The employment demographics are as follows: <ul style="list-style-type: none"> <li>• Youth – 55%</li> <li>• Female – 60%</li> <li>• Disabled – 2%</li> </ul> </li> <li>5. Wherever feasible labour will be deployed to Local Municipalities for service delivery at the cost of the Contractor.</li> </ol> |
| Temporary Suspension of Works   | <p>Planned Annual allocated budget available can be reduced at the Employer's discretion. In the event that annual budget is reduced or exhausted, the Contractor shall not be allowed stop the Works and or claim interest on the unpaid Works.</p> <p><b>No claim shall be submitted to the Department once the budget is depleted.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Works Schedule                  | <p>Activities specified on the Bill of Quantities under Section A should include all work items and provisional sums and should be priced by the tenderer evenly. Tender amount should be calculated according Section A of the Bill of Quantities.</p> <p>Items listed under section B of the Bill of Quantities are subcontractor related items and should amount to 30% of the contract amount (excl Contingencies). Sections B will be left blank during tender stage.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Socio – Economic of Community   | <p>1% of Contract Value shall be invested into local Community.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|                    |                                                                                                                                                                                                                                                                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    |                                                                                                                                                                                                                                                                                                                                               |
| Skills Development | <ol style="list-style-type: none"> <li>1. Two (2) Civil Engineering Students shall be appointed for experiential Training with stipend of R10000.00 each per month, signed off reports must be submitted to respective Departmental Project Managers.</li> </ol> <p>- Members of Community must also be trained in Labour Intensive Works</p> |

.....  
SIGNATURE

### **C1.2.3 DATA PROVIDED BY THE TENDERER**

Clause 6.8.3 of the GCC:

| <b>Special materials</b> | <b>Unit on which<br/>variation will<br/>be determined<br/>*</b> | <b>Rate or price for<br/>the base Month<br/>(excluding VAT)<br/>**</b> |
|--------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------|
|                          |                                                                 |                                                                        |
|                          |                                                                 |                                                                        |
|                          |                                                                 |                                                                        |
|                          |                                                                 |                                                                        |
|                          |                                                                 |                                                                        |
|                          |                                                                 |                                                                        |
|                          |                                                                 |                                                                        |

#### **Notes:**

- \* Indicate whether the material will be delivered in bulk or in containers.
- \*\* The price for special materials is only the price for the material and does not include the cost of transport, labour or any other costs. When called upon to do so, the Tenderer shall substantiate the above prices with acceptable documentary evidence.

.....  
SIGNATURE

**FREE STATE PROVINCIAL GOVERNMENT**  
**DEPARTMENT OF POLICE, ROADS AND TRANSPORT**  
**PR&T C109/2021**  
**FOR**  
**SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND**  
**P6/1 BETWEEN WEPENER, DEWETSDORP AND**  
**BLOEMFONTEIN**

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**Part C2. Pricing Data**

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|             |                                      |                    |
|-------------|--------------------------------------|--------------------|
| <b>C2.1</b> | <b>Pricing Instructions</b>          | <b>Page C2 - 1</b> |
| <b>C2.2</b> | <b>Bill of Quantities Schedule A</b> | <b>Page C2 - 5</b> |

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|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> |
| Contractor  | Witness 1   | Witness 2   | Employer    | Witness 1   | Witness 2   |

**FREE STATE PROVINCIAL GOVERNMENT**  
**DEPARTMENT OF POLICE, ROADS AND TRANSPORT**  
**PR&T C109/2021**

**FOR**  
**SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND**  
**P6/1 BETWEEN WEPENER, DEWETSDORP AND**  
**BLOEMFONTEIN**

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**Part C2.1. Pricing Instructions**

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|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## C2.1 Pricing Instructions

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C2.1.1 Measurement and payment shall be in accordance with the relevant provisions of the COTO Standard Specifications for Road and Bridge Works for south African Road Authorities (Draft Standard October 2020), issued by the Committee of Land Transport Officials as amended in the Scope of Works.

C2.1.2 The units of measurement described in the Pricing Schedule are metric units. Abbreviations used in the Pricing Schedule are as follows:

|                      |   |                       |
|----------------------|---|-----------------------|
| %                    | = | percent               |
| h                    | = | hour                  |
| ha                   | = | hectare               |
| kg                   | = | kilogram              |
| kl                   | = | kilolitre             |
| km                   | = | kilometre             |
| km-pass              | = | kilometre-pass        |
| kPa                  | = | kilopascal            |
| kW                   | = | kilowatt              |
| l                    | = | litre                 |
| m                    | = | metre                 |
| mm                   | = | millimetre            |
| m <sup>2</sup>       | = | square metre          |
| m <sup>2</sup> -pass | = | square metre-pass     |
| m <sup>3</sup>       | = | cubic metre           |
| m <sup>3</sup> -km   | = | cubic metre-kilometre |
| MPa                  | = | megapascal            |
| No.                  | = | number                |
| Prov sum             | = | Provisional sum       |
| PC Sum               | = | Prime Cost sum        |
| R/only               | = | Rate only             |
| sum                  | = | lump sum              |
| t                    | = | ton (1000kg)          |
| W/day                | = | Work day              |

C2.1.3 For the purpose of the Pricing Schedule, the following words shall have the meanings assigned to them:

Unit: The unit of measurement for each item of work as defined in the COTO Standard Specifications for Road and Bridge Works for south African Road Authorities (Draft Standard October 2020), issued by the Committee of Land Transport Officials

Quantity: The number of units of work for each item.

Rate: The payment per unit of work for which the Service Provider tenders to do the work.

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Amount: The product of the quantity and the rate tendered for an item.

Lump Sum: An amount tendered for an item, the extent of which is described in the Pricing Schedule, the Scope of Work or elsewhere, but of which the quantity of work is not measured in units.

- C2.1.4 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- C2.1.5 It will be assumed that prices included in the bills of quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to [www.stanza.org.za](http://www.stanza.org.za) or [www.iso.org](http://www.iso.org) for information standards).
- C2.1.6 The prices and rates in the Pricing Schedule are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
- C2.1.7 Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items.
- C2.1.8 An item against which no price is entered will be considered to be covered by the other prices or rates in the Pricing Schedule. A single lump sum will apply should a number of items be grouped together for pricing purposes.
- C2.1.9 The quantities set out in the Pricing Schedule are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Pricing Schedule.
- C2.1.10 Reasonable compensation will be received where no pay item appears in the Pricing Schedule in respect of work required in terms of the Contract and which is not covered in any other pay item.
- C2.1.11 The short descriptions of the items of payment given in the Pricing Schedule are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C2.1.12 The item numbers appearing in the Pricing Schedule refer to the corresponding item numbers in the COTO Standard Specifications for Road and Bridge Works for south African Road Authorities (Draft Standard October 2020), issued by the Committee of Land Transport Officials

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|            |           |           |          |           |           |
|------------|-----------|-----------|----------|-----------|-----------|
|            |           |           |          |           |           |
| Contractor | Witness 1 | Witness 2 | Employer | Witness 1 | Witness 2 |

**Dewetsdorp to Bloemfontein (50km)**

## Bill of Quantities

## GENERAL REQUIREMENTS AND PROVISIONS

| Item                  | Description                                                                                                                                                   | Unit     | Quantity | Rate        | Amount R |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------------|----------|
| C1.2                  | GENERAL REQUIREMENTS AND PROVISIONS                                                                                                                           |          |          |             |          |
| C1.2.1                | Environmental Management:                                                                                                                                     |          |          |             |          |
| B - C1.2.1.1          | Monitoring of compliance with and reporting on the EMP                                                                                                        | Prov sum | 1        | R500 000,00 |          |
|                       | (a) Contractor's handling costs, profit and all other charges in respect of item C1.2.1.1                                                                     | %        |          |             |          |
| C1.2.3                | Routine road maintenance of existing public roads within the Site of the Works or other public roads outside the Site of the Works which are used as detours: |          |          |             |          |
| C1.2.3.9              | Grading of temporary gravel deviations and existing roads used as detours                                                                                     | km       | 50       |             |          |
| C1.2.3.10             | Watering of temporary gravel deviations and existing roads used as detours                                                                                    | kℓ       | 55000    |             |          |
| C1.2.3.11             | Other road maintenance work ordered by the Engineer                                                                                                           | Prov sum | 1        | R100 000,00 |          |
| C1.2.3.12             | Handling cost, profit and all other charges in respect of item C1.2.3.11                                                                                      | %        |          |             |          |
| C1.2.4                | Stakeholder liaison                                                                                                                                           | month    | 24       |             |          |
| C1.2.5                | Safety:                                                                                                                                                       |          |          |             |          |
| C1.2.5.1              | Health and safety plan                                                                                                                                        | Lump sum | 1        |             |          |
| C1.2.5.2              | Implementation of health and safety plan                                                                                                                      | month    | 24       |             |          |
| C1.2.7                | Road safety audits:                                                                                                                                           |          |          |             |          |
| C1.2.7.1              | Stage 4 work zone traffic management audit                                                                                                                    | Prov sum | 1        | R100 000,00 |          |
| C1.2.7.2              | Handling cost, profit and all other charges in respect of item C1.2.6.1                                                                                       | %        |          |             |          |
| C1.2.7.3              | Stage 5 pre-opening stage traffic safety audit                                                                                                                | Prov sum | 1        | R50 000,00  |          |
| C1.2.7.4              | Handling cost, profit and all other charges in respect of item C1.2.6.3                                                                                       | %        |          |             |          |
| C1.2.8                | Dayworks:                                                                                                                                                     |          |          |             |          |
| C1.2.8.1              | Personnel:                                                                                                                                                    |          |          |             |          |
|                       | (a) Unskilled labourer                                                                                                                                        | h        | 100      |             |          |
|                       | (b) Semi-skilled labourer                                                                                                                                     | h        | 50       |             |          |
|                       | (c) Skilled labourer                                                                                                                                          | h        | 50       |             |          |
|                       | (d) Gang leader                                                                                                                                               | h        | 50       |             |          |
|                       | (e) Foreman                                                                                                                                                   | h        | 50       |             |          |
|                       | (f) Skilled Artisan                                                                                                                                           | h        | 50       |             |          |
| C1.2.8.2              | Construction equipment (specify size and / or model number):                                                                                                  |          |          |             |          |
|                       | (a) Motor grader                                                                                                                                              | h        | 60       |             |          |
|                       | (b) Vibratory roller                                                                                                                                          | h        | 60       |             |          |
|                       | (c) Pneumatic roller                                                                                                                                          | h        | 60       |             |          |
| Total Carried Forward |                                                                                                                                                               |          |          |             |          |

## Bill of Quantities

| Item                             | Description                                                                                                     | Unit     | Quantity | Rate           | Amount R |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------|----------|----------|----------------|----------|
| Brought Forward                  |                                                                                                                 |          |          |                |          |
|                                  | (d) Front end loader                                                                                            | h        | 60       |                |          |
|                                  | (e) Tractor loader backhoe                                                                                      | h        | 60       |                |          |
|                                  | (f) Excavator                                                                                                   | h        | 60       |                |          |
|                                  | (g) Compressor                                                                                                  | h        | 60       |                |          |
|                                  | (h)Mechanical Broom                                                                                             | h        | 120      |                |          |
| C1.2.8.3                         | Vehicles (specify size):                                                                                        |          |          |                |          |
|                                  | (a) Light delivery vehicle                                                                                      | km       | 2000,00  |                |          |
|                                  | (b) Flatbed truck                                                                                               | km       | 500,00   |                |          |
|                                  | (c) Dump truck                                                                                                  | km       | 500,00   |                |          |
|                                  | (d) Other vehicles                                                                                              | km       | 500,00   |                |          |
| C1.2.8.4                         | Materials:                                                                                                      |          |          |                |          |
|                                  | (a) Procurement of materials                                                                                    | Prov sum | 1        | R100 000,00    |          |
|                                  | (b) Contractor's handling costs, profit and all other charges in respect of item C1.2.8.4(a)                    | %        |          |                |          |
| C1.2.9                           | Disposal of non-useable assets:                                                                                 |          |          |                |          |
| B - C1.2.9.4                     | Surveyor                                                                                                        | Prov sum | 1        | R2 400 000,00  |          |
|                                  | Handling cost, profit and all other charges in respect of item C1.2.9.4                                         | %        |          |                |          |
| B - C1.2.9.5                     | Commercial Laboratory Cost, including borrowpit investigation cost                                              | Prov sum | 1        | R6 000 000,00  |          |
|                                  | Handling cost, profit and all other charges in respect of item C1.2.9.5                                         | %        |          |                |          |
| B - C1.2.9.6                     | Contractor's direct cost of procurement, training and management of Targeted Enterprises (local subcontractors) | Prov sum | 1        | R12 000 000,00 |          |
|                                  | Handling cost, profit and all other charges in respect of item C1.2.9.6                                         | %        |          |                |          |
| B - C1.2.9.7                     | Mentoring of personnel and local sub-contractors                                                                | Prov sum | 1        | R4 800 000,00  |          |
|                                  | Handling cost, profit and all other charges in respect of item C1.2.9.7                                         | %        |          |                |          |
| Total Carried Forward To Summary |                                                                                                                 |          |          |                |          |

## Bill of Quantities

## CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

[illegible]

**Dewetsdorp to Bloemfontein (50km)****Bill of Quantities****FACILITIES FOR THE ENGINEER**

| Item                  | Description                                                                            | Unit     | Quantity | Rate       | Amount R |
|-----------------------|----------------------------------------------------------------------------------------|----------|----------|------------|----------|
| C1.4                  | FACILITIES FOR THE ENGINEER                                                            |          |          |            |          |
| C1.4.1                | Site accommodation:                                                                    |          |          |            |          |
| C1.4.1.1              | Offices and conference room                                                            | m²       | 170,00   |            |          |
| C1.4.1.2              | Laboratories                                                                           | m²       | 160,00   |            |          |
| C1.4.1.3              | Open concrete working floors and verandas                                              | m²       | 240,00   |            |          |
| C1.4.1.4              | Roofs over open concrete working floors and verandas                                   | m²       | 240,00   |            |          |
| C1.4.1.5              | Store rooms inside the laboratory                                                      | m²       | 10,00    |            |          |
| C1.4.1.6              | Car ports                                                                              | No       | 6,00     |            |          |
| C1.4.1.7              | Ablution unit (equipped as specified)                                                  | No       | 1,00     |            |          |
| C1.4.1.8              | Change room with a shower                                                              | No       |          |            |          |
| C1.4.1.9              | Kitchen unit (equipped as specified)                                                   | No       | 1,00     |            |          |
| C1.4.1.10             | Type A prefabricated house (equipped as specified)                                     | No       |          |            |          |
|                       |                                                                                        |          |          |            |          |
| C1.4.1.13             | Rented housing paid for by the Contractor                                              | Prov sum | 1        | R60 000,00 |          |
| C1.4.1.14             | Contractor's handling costs, profit and all other charges in respect of item C1.4.1.13 | %        |          |            |          |
| C1.4.2                | Items measured by area:                                                                |          |          |            |          |
| C1.4.2.1              | Shelving as specified, complete with brackets                                          | m²       | 25,00    |            |          |
| C1.4.2.2              | Work benches with a concrete slab top                                                  | m²       | 30,00    |            |          |
| C1.4.2.3              | Work-benches with a wooden top                                                         | m²       | 24,00    |            |          |
| C1.4.2.4              | Constant-temperature baths of concrete and / or plastered brick                        | m²       | 5,00     |            |          |
| C1.4.2.5              | Concrete footings and pedestals for laboratory equipment                               | m²       | 4,00     |            |          |
| C1.4.2.6              | Roller blinds, opaque type                                                             | m²       | 60,00    |            |          |
| C1.4.2.7              | Venetian blinds                                                                        | m²       | 30,00    |            |          |
| C1.4.2.8              | Notice boards                                                                          | m²       | 4,00     |            |          |
| C1.4.2.9              | White boards                                                                           | m²       | 4,00     |            |          |
| C1.4.2.10             | Galvanised wire mesh fencing for store rooms                                           | m²       |          |            |          |
| C1.4.2.11             | Galvanised wire mesh store room gate with a padlock                                    | m²       |          |            |          |
| C1.4.3                | Items measured by number:                                                              |          |          |            |          |
| C1.4.3.1              | Office swivel chair                                                                    | No       | 6,00     |            |          |
| C1.4.3.2              | Office chair                                                                           | No       | 30,00    |            |          |
| C1.4.3.3              | Draughtsman's stool                                                                    | No       | 2,00     |            |          |
| C1.4.3.4              | Laboratory high chair                                                                  | No       | 6,00     |            |          |
| Total Carried Forward |                                                                                        |          |          |            |          |

**Dewetsdorp to Bloemfontein (50km)**

## Bill of Quantities

## FACILITIES FOR THE ENGINEER

| Item                  | Description                                                      | Unit | Quantity | Rate | Amount R |
|-----------------------|------------------------------------------------------------------|------|----------|------|----------|
| Brought Forward       |                                                                  |      |          |      |          |
| C1.4.3.5              | Office desk with 3 drawers (at least one lockable drawer)        | No   | 4,00     |      |          |
| C1.4.3.6              | Typist desk (L-shaped)                                           | No   | 2,00     |      |          |
| C1.4.3.7              | Drawing table                                                    | No   | 5,00     |      |          |
| C1.4.3.8              | Conference table                                                 | No   | 1,00     |      |          |
| C1.4.3.9              | Bookcase                                                         | No   | 3,00     |      |          |
| C1.4.3.10             | Filing cabinet                                                   | No   | 3,00     |      |          |
| C1.4.3.11             | General purpose steel cabinet with shelves                       | No   | 3,00     |      |          |
| C1.4.3.12             | Wall mounted pivot plan filing system                            | No   | 2,00     |      |          |
| C1.4.3.13             | 220 / 250 volt power outlet plug point                           | No   | 56,00    |      |          |
| C1.4.3.14             | 400 / 231 volt 3-phase power outlet plug point                   | No   | 3,00     |      |          |
| C1.4.3.15             | Single 1 500 mm, 58 watt fluorescent tube ceiling light          | No   | 24,00    |      |          |
| C1.4.3.16             | Single 1 500 mm, 22 watt LED tube ceiling light                  | No   | 8,00     |      |          |
| C1.4.3.17             | 11 watt compact fluorescent bulb ceiling light                   | No   | 5,00     |      |          |
| C1.4.3.18             | 7 watt LED bulb ceiling light                                    | No   | 9,00     |      |          |
| C1.4.3.19             | Wash-hand basin                                                  | No   | 2,00     |      |          |
| C1.4.3.20             | Laboratory basin                                                 | No   | 4,00     |      |          |
| C1.4.3.21             | Extractor fan                                                    | No   | 1,00     |      |          |
| C1.4.3.22             | Fume cupboard                                                    | No   | 1,00     |      |          |
| C1.4.3.23             | Fire extinguisher 9,0 kg, dry powder type                        | No   | 9,00     |      |          |
| C1.4.3.24             | Air-conditioning unit                                            | No   | 6,00     |      |          |
| C1.4.3.25             | Heater                                                           | No   | 6,00     |      |          |
| C1.4.3.26             | Concrete specimen curing bath                                    | No   | 1,00     |      |          |
| C1.4.3.27             | Waste paper basket                                               | No   | 10,00    |      |          |
| C1.4.3.28             | UPS / Voltage stabiliser                                         | No   | 10,00    |      |          |
| C1.4.3.29             | A3 / A4 colour printer, copier, scanner                          | No   | 4,00     |      |          |
| C1.4.3.30             | A4 colour printer, copier, scanner                               | No   | 2,00     |      |          |
| C1.4.3.31             | Rain gauge                                                       | No   | 3,00     |      |          |
| C1.4.3.32             | Minimum / maximum atmospheric temperature gauge                  | No   | 3,00     |      |          |
| C1.4.3.33             | Digital thermometer                                              | No   | 9,00     |      |          |
| C1.4.3.34             | Mobile outdoor weather station                                   | No   | 1,00     |      |          |
| C1.4.3.35             | 3,0 m aluminium straight edge complete with two measuring wedges | No   | 9,00     |      |          |
| C1.4.3.36             | Measuring wheel                                                  | No   | 3,00     |      |          |
| C1.4.3.37             | First aid kit                                                    | No   | 8,00     |      |          |
| Total Carried Forward |                                                                  |      |          |      |          |

**Dewetsdorp to Bloemfontein (50km)**
**Bill of Quantities**
**FACILITIES FOR THE ENGINEER**

| Item                  | Description                                                                                                                                                                                                                    | Unit     | Quantity | Rate       | Amount R |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------------|----------|
| Brought Forward       |                                                                                                                                                                                                                                |          |          |            |          |
| C1.4.3.38             | Standpipe complete with 30 m of 19 mm dia. heavy duty hose pipe                                                                                                                                                                | No       | 1,00     |            |          |
| C1.4.4                | Prime cost items:                                                                                                                                                                                                              |          |          |            |          |
| C1.4.4.1              | Cell phones costs, including pro-rata rentals, for calls made in connection with contract administration                                                                                                                       | PC sum   | 1,00     | R72 000,00 |          |
| C1.4.4.2              | Handling costs and profit in respect of item C1.4.4.1                                                                                                                                                                          | %        |          |            |          |
| C1.4.4.5              | The provision of internet connectivity and WiFi data for Engineer's site staff                                                                                                                                                 | PC sum   | 1,00     | R50 000,00 |          |
| C1.4.4.6              | Handling costs and profit in respect of item C1.4.4.5                                                                                                                                                                          | %        |          |            |          |
| C1.4.4.7              | The provision of paper and ink for a combination colour printer / copier / scanner                                                                                                                                             | PC sum   | 1,00     | R50 000,00 |          |
| C1.4.4.8              | Handling costs and profit in respect of item C1.4.4.7                                                                                                                                                                          | %        |          |            |          |
| C1.4.4.9              | The provision of a complete 220 / 250 volt single phase electrical power installation, including all poles, insulators, wiring, switchboards, mains connections, meters, etc.                                                  | PC sum   | 1,00     | R50 000,00 |          |
| C1.4.4.10             | Handling costs and profit in respect of item C1.4.4.9                                                                                                                                                                          | %        |          |            |          |
| C1.4.4.11             | The provision of a complete 440 / 231 volt three phase electrical power installation, including all poles, insulators, wiring, switchboards, mains connections, meters, etc.                                                   | PC sum   | 1,00     | R50 000,00 |          |
| C1.4.4.12             | Handling costs and profit in respect of item C1.4.4.11                                                                                                                                                                         | %        |          |            |          |
| C1.4.4.13             | Provision of a 440 / 231 volt three phase electricity generator if electricity from a power supply authority is not available on site                                                                                          | PC sum   | 1,00     | R50 000,00 |          |
| C1.4.4.14             | Handling costs and profit in respect of item C1.4.4.13                                                                                                                                                                         | %        |          |            |          |
| C1.4.4.15             | The provision of all gas installations required at the site offices, laboratories and at the Engineer's staff accommodation (if required), including gas storage cylinders, tubing, regulators, gas burners and shut-off cocks | PC sum   | 1,00     | R25 000,00 |          |
| C1.4.4.16             | Handling costs and profit in respect of item C1.4.4.15                                                                                                                                                                         | %        |          |            |          |
| C1.4.5                | Services at site offices, laboratories and site accommodation:                                                                                                                                                                 |          |          |            |          |
| C1.4.5.1              | Fixed costs                                                                                                                                                                                                                    | Lump sum | 1,00     |            |          |
| C1.4.5.2              | Running costs                                                                                                                                                                                                                  | month    | 24       |            |          |
| C1.4.6                | Office staff:                                                                                                                                                                                                                  |          |          |            |          |
| C1.4.6.1              | Secretary / receptionist                                                                                                                                                                                                       | month    | 24       |            |          |
| C1.4.6.2              | Technical assistant                                                                                                                                                                                                            | month    | 24       |            |          |
| C1.4.7                | Site inspection transport:                                                                                                                                                                                                     |          |          |            |          |
| Total Carried Forward |                                                                                                                                                                                                                                |          |          |            |          |

## Bill of Quantities

## FACILITIES FOR THE ENGINEER

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7

**Dewetsdorp to Bloemfontein (50km)**
**Bill of Quantities**
**ACCOMMODATION OF TRAFFIC**

| Item                  | Description                                                                                                            | Unit      | Quantity | Rate        | Amount R |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|-----------|----------|-------------|----------|
| C1.5                  | ACCOMMODATION OF TRAFFIC                                                                                               |           |          |             |          |
| C1.5.2                | Accommodation of vehicular traffic                                                                                     | month     | 24       |             |          |
| C1.5.4                | Construction of temporary deviations                                                                                   |           |          |             |          |
| C1.5.5                | Maintenance of temporary deviations:                                                                                   |           |          |             |          |
| C1.5.5.1              | Grass cutting                                                                                                          | ha        | 2        |             |          |
| C1.5.5.9              | Grading of temporary deviations and existing roads used as detours                                                     | km        | 50       |             |          |
| C1.5.5.10             | Watering of temporary deviations and existing roads used as detours                                                    | kℓ        | 50000    |             |          |
| C1.5.5.11             | Other road maintenance work ordered by the Engineer                                                                    | Prov sum  | 1        | R100 000,00 |          |
| C1.5.5.12             | Handling cost, profit and all other charges in respect of item C1.5.6.11                                               | %         |          |             |          |
| C1.5.6                | Removal of temporary deviations                                                                                        | km        | 50       |             |          |
| C1.5.7                | Temporary traffic control facilities:                                                                                  |           |          |             |          |
| C1.5.7.1              | Delineators including mounting bases and ballast:                                                                      |           |          |             |          |
|                       | (a) Single sided, reversible left or right (800 x 200)                                                                 | No        | 1100,00  |             |          |
|                       | (b) Double sided, reversible left or right (800 x 200)                                                                 | No        | 7 200    |             |          |
| C1.5.7.2              | Traffic cones, minimum height 750 mm                                                                                   | No        | 70,00    |             |          |
| C1.5.7.3              | Flagmen                                                                                                                | man-shift | 12000    |             |          |
| C1.5.7.4              | Traffic controllers                                                                                                    | man-shift | 40000    |             |          |
| C1.5.7.5              | Provision of illuminated traffic signs:                                                                                |           |          |             |          |
|                       | (a) Sign mounted flashing amber lights (2 lights with the specified power supply) mounted on a backing board which is: | No        | 12,00    |             |          |
|                       | (i) 900 mm wide x 150 mm high                                                                                          | No        | 12,00    |             |          |
|                       | (ii) 1 200 mm wide x 200 mm high                                                                                       | No        | 12,00    |             |          |
|                       |                                                                                                                        |           |          |             |          |
|                       |                                                                                                                        |           |          |             |          |
|                       | (e) Mobile variable message sign                                                                                       | No        | 02       |             |          |
| C1.5.7.6              | Maintenance of illuminated traffic signs:                                                                              |           |          |             |          |
|                       | (a) Sign mounted flashing amber lights (a pair of two lights mounted on a separate backing board)                      | month     | 24       |             |          |
|                       | (b) Flashing LED illuminated arrow board                                                                               | month     | 24       |             |          |
| Total Carried Forward |                                                                                                                        |           |          |             |          |

## Bill of Quantities

## ACCOMMODATION OF TRAFFIC

9

## Bill of Quantities

## CLEARING AND GRUBBING

|                                  |  |
|----------------------------------|--|
| Total Carried Forward To Summary |  |
|----------------------------------|--|

## Bill of Quantities

## LOADING AND HAULING

[illegible]

**Dewetsdorp to Bloemfontein (50km)**

## Bill of Quantities

## COMMERCIAL MATERIALS

| Item                             | Description                                                                            | Unit  | Quantity  | Rate | Amount R  |
|----------------------------------|----------------------------------------------------------------------------------------|-------|-----------|------|-----------|
| C4.1                             | <b>BORROW MATERIALS</b>                                                                |       |           |      |           |
| C4.1.4                           | <b>Removing of the overburden</b>                                                      |       |           |      |           |
| C4.1.4.1                         | In borrow pits                                                                         | m³    | 1 000,00  |      |           |
| C4.1.4.2                         | In quarries:                                                                           |       |           |      |           |
|                                  | (a) Soft material                                                                      | m³    | 500,00    |      |           |
|                                  | (b) Hard material (by blasting)                                                        | m³    | 200,00    |      |           |
| C4.1.5                           | <b>Excavating of materials in the borrow pits and quarries, material obtained from</b> |       |           |      |           |
| C4.1.5.1                         | Soft excavation                                                                        | m³    | 1 000,00  |      |           |
| C4.1.5.4                         | Hard excavation (other than by blasting)                                               | m³    | 7 000,00  |      |           |
| C4.1.5.5                         | Hard excavation (by blasting)                                                          | m³    | 2 000,00  |      |           |
| C4.1.6                           | <b>Providing crushing, screening and related plants</b>                                |       |           |      |           |
| C4.1.6.1                         | Single-stage crushing plant                                                            | No    | -         |      | Rate only |
| C4.1.6.2                         | Multi-stage crushing plant                                                             | No    | 1,00      |      |           |
| C4.1.7                           | <b>Producing the material by</b>                                                       |       |           |      |           |
| C4.1.7.1                         | Single-stage crushing                                                                  | m³    | -         |      | Rate only |
| C4.1.7.2                         | Multi-stage crushing                                                                   | m³    | 10 000,00 |      |           |
| C4.1.8                           | <b>Moving and re-erecting the crushing, screening and related plants on the site</b>   |       |           |      |           |
| C4.1.8.1                         | Single-stage crushing plant                                                            | No    | -         |      | Rate only |
| C4.1.8.2                         | Multi-stage crushing plant                                                             | No    | 1,00      |      |           |
| C4.1.9                           | <b>Breaking down oversize material</b>                                                 | m³    | 500,00    |      |           |
| C4.1.11                          | <b>Constructing a platform for the stockpile site</b>                                  | m³    | 1 000,00  |      |           |
| C4.1.12                          | <b>Stockpiling the material</b>                                                        |       |           |      |           |
| C4.1.12.1                        | Material from a producing plant                                                        | m³    | 10 000,00 |      |           |
| C4.1.15                          | <b>Shaping and finishing the borrow pit and quarry areas, and the stockpile sites</b>  |       |           |      |           |
| C4.1.15.1                        | Shaping and finishing the borrow pit and quarry areas, and the stockpile sites         | ha    | 2,00      |      |           |
| C4.1.17                          | <b>Weighbridge facility</b>                                                            |       |           |      |           |
| C4.1.17.1                        | Providing, erecting and removal of a weighbridge facility                              | L Sum | 1,00      |      |           |
| C4.1.17.2                        | Operating the weighbridge                                                              | month | 15,00     |      |           |
| Total Carried Forward To Summary |                                                                                        |       |           |      |           |

## Bill of Quantities

## ROAD PAVEMENT LAYERS

[illegible]

## Bill of Quantities

## ROAD PAVEMENT LAYERS

[illegible]

## Bill of Quantities

[illegible]

**Dewetsdorp to Bloemfontein (50km)**

## Bill of Quantities

## RECONSTRUCTION OF PAVEMENT LAYERS

| Item                             | Description                                                                                                                   | Unit | Quantity | Rate | Amount R |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------|----------|------|----------|
| C5.5                             | RECONSTRUCTION OF PAVEMENT LAYERS                                                                                             |      |          |      |          |
| C5.5.1                           | Compiling and implementing M&U plans for the reconstruction of an existing road pavement                                      | No   | 2        |      |          |
| C5.5.3                           | Construction equipment for sampling of in-situ material for mix design procedure                                              | No   | 10       |      |          |
| C5.5.4                           | Sampling of in-situ material for mix design procedure                                                                         | No   | 10       |      |          |
| C5.5.5                           | Construction of a trial section using a recycler                                                                              | m³   | 427,00   |      |          |
| C5.5.6                           | Construction of a trial section using conventional construction equipment                                                     | m³   | 300,00   |      |          |
| C5.5.8                           | Pre-pulverising material in the existing pavement:                                                                            |      |          |      |          |
| C5.5.8.1                         | Asphalt wearing course (40mm depth)                                                                                           | m³   | 1000,00  |      |          |
| C5.5.8.2                         | Crushed stone base (100mm depth)                                                                                              | m³   | 95200,00 |      |          |
| C5.5.15                          | In-situ reconstruction of a pavement layer using a recycler to construct a stabilised subbase layer:                          |      |          |      |          |
| C5.5.15.1                        | Chemically stabilised subbase layer compacted to 97 % of MDD:                                                                 |      |          |      |          |
|                                  | (b) Using cemented material compacted to 250mm thick                                                                          | m³   | 10313    |      |          |
| C5.5.18                          | In-situ reconstruction of a pavement layer using conventional construction equipment to construct a stabilised subbase layer: |      |          |      |          |
| C5.5.18.1                        | Chemically stabilised subbase layer compacted to 97 % of MDD:                                                                 |      |          |      |          |
|                                  | (d) Using pre-pulverised material (as per item C5.5.8) compacted to 200 mm thick                                              | m³   | 95200    |      |          |
| C5.5.20                          | Material shortfall or make-up material:                                                                                       |      |          |      |          |
| C5.5.20.2                        | For subbase layer                                                                                                             | m³   | 3600     |      |          |
| Total Carried Forward To Summary |                                                                                                                               |      |          |      |          |

## Bill of Quantities

## PRIME COAT

[illegible]

**Dewetsdorp to Bloemfontein (50km)**

## Bill of Quantities

## COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS

| Item                             | Description                                             | Unit | Quantity | Rate | Amount R |
|----------------------------------|---------------------------------------------------------|------|----------|------|----------|
| C8.2                             | COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS        |      |          |      |          |
| C8.2.1                           | Cover sprays, fog sprays and rejuvenation sprays:       |      |          |      |          |
| C8.2.1.2                         | 60 % Anionic stable grade emulsion:                     |      |          |      |          |
|                                  | (a) Indicate dilution (diluted 50% emulsion /50% water) | ℓ    | 367200   |      |          |
| Total Carried Forward To Summary |                                                         |      |          |      |          |

18

**Koffiefontein to Havenga bridge ( 50km)**

## Estimate

## TEXTURE TREATMENT

| Item                             | Description                                                                                                                      | Unit | Quantity | Rate | Amount R |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------|----------|------|----------|
| C8.3                             | TEXTURE TREATMENT                                                                                                                |      |          |      |          |
| C8.3.1                           | Texture treatment:                                                                                                               |      |          |      |          |
| C8.3.1.1                         | Application of slurry for texture improvement, applied by hand (indicate aggregate grade, type of emulsion, filler type)         | m³   | 120      |      |          |
| C8.3.1.2                         | Application of slurry for texture improvement, applied by spreader box (indicate aggregate grade, type of emulsion, filler type) | m³   | 200      |      |          |
| Total Carried Forward To Summary |                                                                                                                                  |      |          |      |          |

19

**Dewetsdorp to Bloemfontein (50km)**

## Bill of Quantities

## GENERAL REQUIREMENTS FOR SURFACE TREATMENTS

| Item                  | Description                                                                                                                 | Unit     | Quantity | Rate | Amount R  |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|----------|----------|------|-----------|
| C10.1                 | GENERAL REQUIREMENTS FOR SURFACE TREATMENTS                                                                                 |          |          |      |           |
| C10.1.3               | Multiple stone seals including a cover spray, if specified using:                                                           |          |          |      |           |
| C10.1.3.1             | 20 mm and 10 mm aggregate (Grade 1 Aggregate and Class S-E1 modified binder)                                                | m²       | 918000   |      |           |
| C10.1.4               | Embargo period effects:                                                                                                     |          |          |      |           |
| C10.1.4.1             | Re-establishment of sealing team after embargo period                                                                       | Lump sum | 2        |      |           |
| C10.1.4.2             | Extra-over for sealing during the specified embargo period (Grade 1 Aggregate and Class S-CE1 winter grade modified binder) | m²       | 50000    |      |           |
| C10.1.9               | Bituminous binder variations:                                                                                               |          |          |      |           |
| C10.1.9.11            | Precoating fluid (state type)                                                                                               | ℓ        | 3000,00  |      |           |
| C10.1.10              | Aggregate variation (state grade):                                                                                          |          |          |      |           |
| C10.1.10.3            | 10 mm aggregate                                                                                                             | m³       | 25       |      |           |
| C10.1.10.5            | 20 mm aggregate                                                                                                             | m³       | 50       |      |           |
| C10.1.11              | Application of cover spray:                                                                                                 |          |          |      |           |
| C10.1.11.2            | 60 % Diluted Anionic stable-grade emulsion (dilution in 50% emulsion / 50% water)                                           | ℓ        | 550800   |      |           |
| C10.1.12              | Application of cover spray by hand:                                                                                         |          |          |      |           |
| C10.1.12.2            | 60% Diluted Anionic Stable-grade emulsion (dilution in 50% emulsion / 50% water)                                            | ℓ        | 0        |      | Rate only |
| C10.1.13              | Precoating of aggregate using a dedicated plant:                                                                            |          |          |      |           |
| C10.1.13.1            | Product containing low flashpoint solvent (Colcote or similar @12-16l/m³ precoating fluid)                                  | ℓ        | 257040   |      |           |
| C10.1.13.2            | Product containing no low flashpoint solvent (Colcote or similar @12-16l/m³ precoating fluid)                               | ℓ        | 257040   |      |           |
|                       |                                                                                                                             |          |          |      |           |
|                       |                                                                                                                             |          |          |      |           |
|                       |                                                                                                                             |          |          |      |           |
| Total Carried Forward |                                                                                                                             |          |          |      |           |

**Dewetsdorp to Bloemfontein (50km)**  
Bill of Quantities

| GENERAL REQUIREMENTS FOR SURFACE TREATMENTS |                                                                 |          |          |      |          |
|---------------------------------------------|-----------------------------------------------------------------|----------|----------|------|----------|
| Item                                        | Description                                                     | Unit     | Quantity | Rate | Amount R |
| Brought Forward                             |                                                                 |          |          |      |          |
| C10.1.26                                    | Trial sections for all seal types specified (20/10mm seal type) | Lump sum | 1        |      |          |
|                                             |                                                                 |          |          |      |          |
|                                             |                                                                 |          |          |      |          |
| Total Carried Forward To Summary            |                                                                 |          |          |      |          |

**Dewetsdorp to Bloemfontein (50km)**

## Bill of Quantities

## GENERAL REQUIREMENTS FOR SURFACE TREATMENTS

| Item                  | Description                                                                                                                                 | Unit | Quantity | Rate | Amount R |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------|----------|
| Brought Forward       |                                                                                                                                             |      |          |      |          |
| C11.5.1               | SUPPLY AND ERECT NEW FENCING MATERIAL FOR NEW FENCES AND FOR SUPPLEMENTING MATERIAL IN EXISTING FENCES WHICH ARE BEING REPAIRED OR REMOVED: |      |          |      |          |
| C11.5.1.1             | Zinc-coated barbed wire (grade, and size indicated)                                                                                         | Km   | 50       |      |          |
| C11.5.1.7             | Standards (material, protection, length, diameter and type indicated)                                                                       | No   | 100      |      |          |
| C11.5.1.8             | Droppers (material, protection, length, diameter and type indicated)                                                                        | No   | 250      |      |          |
| C11.5.2               | New Gates (size and type indicated)                                                                                                         | No   | 4        |      |          |
| C11.5.4               | Dismantling existing fences and gates:                                                                                                      |      |          |      |          |
| C11.5.4.1             | Fences:                                                                                                                                     |      |          |      |          |
|                       | (a) Stock-proof fences                                                                                                                      | Km   | 5        |      |          |
|                       |                                                                                                                                             |      |          |      |          |
|                       |                                                                                                                                             |      |          |      |          |
| Total Carried Forward |                                                                                                                                             |      |          |      |          |

## Bill of Quantities

## GENERAL REQUIREMENTS FOR SURFACE TREATMENTS

23

## Bill of Quantities

## GENERAL REQUIREMENTS FOR SURFACE TREATMENTS

24

## Bill of Quantities

## GENERAL REQUIREMENTS FOR SURFACE TREATMENTS

Total Carried Forward

## Bill of Quantities

## FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

Total Carried Forward To Summary

## SUMMARY OF SECTIONS

| Chapter | Description                                                                                                                                  | Amount R |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------|----------|
| C1.2    | GENERAL REQUIREMENTS AND PROVISIONS                                                                                                          |          |
| C1.3    | CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS                                                                                      |          |
| C1.4    | FACILITIES FOR THE ENGINEER                                                                                                                  |          |
| C1.5    | ACCOMMODATION OF TRAFFIC                                                                                                                     |          |
| C1.6    | CLEARING AND GRUBBING                                                                                                                        |          |
| C1.7    | LOADING AND HAULING                                                                                                                          |          |
| C4.1    | BORROW MATERIALS                                                                                                                             |          |
| C4.4    | COMMERCIAL MATERIALS                                                                                                                         |          |
| C5.3    | ROAD PAVEMENT LAYERS                                                                                                                         |          |
| C5.4    | STABILISATION                                                                                                                                |          |
| C5.5    | RECONSTRUCTION OF PAVEMENT LAYERS                                                                                                            |          |
| C8.1    | PRIME COAT                                                                                                                                   |          |
| C8.2    | COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS                                                                                             |          |
| C8.3    | TEXTURE TREATMENT                                                                                                                            |          |
| C10.1   | GENERAL REQUIREMENTS FOR SURFACE TREATMENTS                                                                                                  |          |
| C11.4.1 | ERECTING OF GUARDRAILS AT 3,81 M SPACING                                                                                                     |          |
| C11.5.1 | SUPPLY AND ERECT NEW FENCING MATERIAL FOR NEW FENCES AND FOR SUPPLEMENTING MATERIAL IN EXISTING FENCES WHICH ARE BEING<br>REMOVED OR REMOVED |          |
| C11.6.1 | ROAD MARKINGS                                                                                                                                |          |
| C11.7   | RETRO-REFLECTIVE ROAD MARKING                                                                                                                |          |
| C11.9   | FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS                                                                                   |          |
|         | TOTAL FOR SCHEDULED ITEMS CARRIED FORWARD - SUMMARY                                                                                          |          |
|         |                                                                                                                                              |          |
|         | CPA (/Applicable) 5%                                                                                                                         |          |
|         |                                                                                                                                              |          |
|         | 10% Contingencies                                                                                                                            |          |
|         |                                                                                                                                              |          |
|         | SUBTOTAL                                                                                                                                     |          |
|         |                                                                                                                                              |          |
|         | Add 15% VAT                                                                                                                                  |          |
|         | <b>Tender Sum</b>                                                                                                                            |          |

# **PART C3**

## **SCOPE OF WORK**

## **SECTION A1: STANDARD AMENDMENTS ISSUED BY COTO**

### **Notes to tenderer:**

- 1. The Standard Specifications for Road and Bridge Works for South African Road Authorities (Draft Standard October 2020 edition) prepared by the Committee of Transport Officials, (COTO), as amended, shall apply to this contract. The amendments are those issued by COTO and reproduced in Section A1, together with additional amendments as set out in Section A2 and Project specific Specification Data as set out in Section B.**

## **SECTION A2: PROJECT SPECIFICATION AMENDMENTS TO THE COTO STANDARD SPECIFICATIONS**

### **Notes to tenderer:**

- 1. This Section A2 contains amendments to the Standard Specification, including additional clauses, amendment to clauses or deletion of clauses and specifications, required for this particular contract. Where the Standard Specifications allow a choice to be specified in the Contract Documentation or Project Specifications, between alternative materials or methods of construction, and for additional requirements to be specified to suit a particular contract, these selections are not made in this Section A2. Details of such alternatives or additional requirements applicable to this contract are contained in Section B: Specification Data. Section B also contains project specific sections for Sections C, D and E.**
- 2. The number of each clause and each payment item in this part of the project specifications follows the numbering format of the standard specifications.**

## SECTION B: PROJECT SPECIFICATIONS

| TABLE OF CONTENTS                                                  | PAGE  |
|--------------------------------------------------------------------|-------|
| COTO CHAPTER 1: GENERAL .....                                      | C3-5  |
| COTO CHAPTER 2: SERVICES.....                                      | C3-9  |
| COTO CHAPTER 3: DRAINAGE.....                                      | C3-10 |
| COTO CHAPTER 4: EARTHWORKS AND PAVEMENT LAYERS: MATERIALS.....     | C3-11 |
| COTO CHAPTER 5: EARTHWORKS AND PAVEMENT LAYERS: CONSTRUCTION ..... | C3-12 |
| COTO CHAPTER 6: CONCRETE LAYERS.....                               | C3-13 |
| COTO CHAPTER 7: MAINTENANCE AND REPAIR OF CONCRETE LAYERS.....     | C3-14 |
| COTO CHAPTER 8: PRETREATMENT AND REPAIR OF EXISTING LAYERS .....   | C3-15 |
| COTO CHAPTER 9: ASPHALT LAYERS.....                                | C3-16 |
| COTO CHAPTER 10: SURFACE TREATMENTS.....                           | C3-17 |
| COTO CHAPTER 11: ANCILLARY ROAD WORKS.....                         | C3-18 |
| COTO CHAPTER 12: GEOTECHNICAL APPLICATIONS.....                    | C3-19 |
| COTO CHAPTER 13: STRUCTURES .....                                  | C3-20 |
| COTO CHAPTER 14: REPAIR AND REHABILITATION OF STRUCTURES.....      | C3-21 |
| COTO CHAPTER 20: QUALITY ASSURANCE .....                           | C3-22 |

**COTO CHAPTER 1: GENERAL**

**SECTION 1.1: GENERAL PREAMBLE**

**PART C: MEASUREMENT AND PAYMENT**

**C1.1.3 PAYMENT**

**C1.1.3.5 Payment for materials on the Site**

*In the last sentence of the 1<sup>st</sup> paragraph, delete the following:*

“, or, in the case of crushed stone which has not been purchased but has been produced on the site, at 80% of a fair evaluation of such crushed material”.

*Add the following new subclauses:*

**"C1.1.3.9 Reduced payments for substandard work**

Where provision for reduced payments for sub-standard work is made in the Contract Documentation, acceptance of reduce payment for substandard work may be accepted by the Engineer subject to prior approval by the Employer.

**C1.1.3.10 Procurement of sub-services and omitted rates (Second tier procurement)**

Second tier procurement include the procurement of any work where either the particulars of the work is not scheduled and priced, or where the process of procurement of the sub-service provider is specified elsewhere in the contract specification. It include the procurement of work where rates have been omitted or where allowance for the work is made under a Provisional sum or Prime sum item or where allowance for the work is made under a Provisional sum or Prime sum item but the particulars of the work is not scheduled, or where work is instructed under clause 13[Variations and Adjustments] or where work is to be performed by Targeted Enterprises.

The following procurement methods is to be followed as appropriate:

- a) **Where the particulars of the work is not scheduled but existing rates for similar work exist in the contract and the work can therefore be executed by the contractor or his sub-contractor at the existing contract rates.**

No separate procurement process is required. The work is to be quantified and scheduled utilising existing rates and approved through the Works Authorisation process.

- b) **Where the payment calculation is based on a formula specified in the contract document, or where the payment rate is pre-determined or fixed by the client.**

No separate procurement process is required. The work is to be quantified and approved through the Works Authorisation process.

- c) **Where the supplier is not selected by the contractor and actual cost is reimbursable and no procurement process is possible.**

No separate procurement process is required. The work is invoiced by supplier on completion and approved through the Works Authorisation process at the end of the contract.

- d) **Where there are omitted items as part of the existing scheduled scope of work and no existing rates for similar work exist in the contract, or where there are no existing rates for the materials to be supplied and suitable rates for material to be determined.**

A proposal for a new rate shall be submitted by the contractor and evaluated by the engineer, by comparing with either adjusted relevant rates in the contract, or by comparing with similar rates on similar contracts, or by comparing three informal quotes to substantiate the rate. The new agreed rate is approved through the Works Authorisation process.

- e) **Where the particulars of the work is not scheduled and the estimated cost of the work (including VAT and excluding Contract Price Adjustment) is equal or less than R500,000.00 and there are no existing rates for similar work and the contractor's proposal submitted in terms of GCC is not accepted and the work is to be performed by a sub-contractor.**

A minimum of three quotations shall be obtained from Targeted Enterprises (as defined in Section D1000). The following is the minimum requirements for this process:

- Prequalification for BEE level 1 or 2 and EME or QSE (Approval to deviate must be granted by the Employer, based on market research)
- Quotation to include form of quotation, CSD registration, CIDB (where applicable),

A Works Authorisation shall be approved prior to execution of the work.

- f) **Where the particulars of the work is not scheduled and the estimated cost of the work is more than R500,000.00 (including VAT and excluding Contract Price Adjustment) and there are no existing rates for similar work and the contractor's proposal submitted in terms of GCC is not accepted and the work is to be performed by a sub-contractor.**

The work is to be procured through a tender process. The following is the minimum requirements for this process:

- Prequalification for BEE level 1 or 2 and EME or QSE (Approval to deviate must be granted by the Employer, based on market research)
- Tenders to close at the relevant site offices at a specific date and time
- Tender documents to include form of Offer, CSD registration, Tax compliance, CIDB (where applicable), SBD1, SBD 4, SBD 8, SBD 9, SBD 6.2, BEE certificate, Form A2.2
- Tenders to be evaluated on price and preference
- Evaluation by contractor for review by engineer

A Works Authorisation shall be approved prior to execution of the work.

- g) **Where the particulars of the work is identified by the contractor to be performed by subcontractors who are Targeted Enterprises to form part of the specified Contract Participation Goals for Targeted Enterprises.**

The work is to be procured as per the process specified in clause D1007.

- h) **Where the work is unforeseen, urgent and the relevant procurement method as indicated above will result in a delay to the contract and payment for a claim for extension of time and/or cost, or where the above procurement methods are not applicable or cannot fully be complied with.**

The Employer will determine the most appropriate procurement process to be followed and approved through the Works Authorisation process."

## SECTION 1.2: GENERAL REQUIREMENTS AND PROVISIONS

### PART A: SPECIFICATIONS

#### A1.2.3 GENERAL

*Add the following new subclause:*

##### "A1.2.3.24 Reference Manuals, other specifications and test methods

In various chapters of this Standard Specification, reference is made to Manuals, other specifications and test methods. If not otherwise indicated in the Contract Documentation, the latest published Manual, other specification and test methods at time of close of tender will apply. Any changes to be implemented on a project as a result of revisions to manuals, other specifications and test methods, will be handled in terms of the Conditions of Contract.

Certain TRH and TMH documents are published as Manuals/TRH or Manuals/TMH publications. Where reference is made to the TRH or TMH document, it shall be read as referring to the latest version of the Manual/TRH publication or Manual/TMH publication, respectively."

#### A1.2.7 EXECUTION OF THE WORKS

##### A1.2.7.1 Programme of work

###### a) General

*Add the following new paragraphs:*

"The contractor shall note that the examination of a road with a view to rehabilitation is normally undertaken a considerable period of time before the commencement of the contract, and that conditions may subsequently change. The engineer will make further examinations during the period of contract, and, depending on the results of such examinations, the quantities of any items of work may be drastically increased or decreased.

The contractor shall base his initial programme for road rehabilitation on the scope of the work as described in the project specifications on the quantities contained in the Pricing Schedule (Part C2)."

## SECTION 1.3: CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

### PART C: MEASUREMENT AND PAYMENT

| Item | Unit |
|------|------|
|------|------|

#### C1.3.1 The Contractor's general obligations

*Add the following pay subitems:*

|           |                         |                         |
|-----------|-------------------------|-------------------------|
| "C1.3.1.4 | Suspension Cost         |                         |
| a)        | De-establishment .....  | Number                  |
| b)        | Re-establishment.....   | Number                  |
| c)        | Suspension period ..... | month                   |
| d)        | Engineer's cost .....   | prime cost sum (PC) sum |

*Add the following new paragraphs:*

“Item C1.3.1.4

The rates tendered under subitem C1.3.1.4 shall represent full compensation for all Costs for Suspension of Work and all Costs during Suspension of Works as per amended Condition of Contract clause 8.9.

Payment of subitems C1.3.1.4(a) and C1.3.1.4(b) shall be made for the number of de-establishments and re-establishments of all Personnel and Goods (Contractor's Equipment, Materials, Plant and Temporary Works) as instructed by the Engineer. Payment of subitems C1.3.1.4(a) and C1.3.1.4(b) shall not apply during the Mobilisation Period.

Payment of subitem C1.3.1.4(c) shall be made monthly, pro rata for parts of a month, from the date on which the Contractor has suspended progress of all of the Works in terms of Conditions of Contract clause 8.8 and commenced with de-establishment of the site, until permission or instruction to proceed in terms of Conditions of Contract clause 8.12 is given. Payment of subitem C1.3.1.4(c) shall not apply during the Mobilisation Period.

The Prime Sum in subitem C1.3.1.4(d) is provided to cover the cost of the Engineer during the period of suspension of the works. The amounts certified by the Employer shall be made to the Engineer, within 30 days of it being certified by the Employer.”

**SECTION 1.4: FACILITIES FOR THE ENGINEER**

There are no amendments to this Chapter

## **COTO CHAPTER 2: SERVICES**

There are no amendments to this Chapter

### **COTO CHAPTER 3: DRAINAGE**

There are no amendments to this Chapter

## **COTO CHAPTER 4: EARTHWORKS AND PAVEMENT LAYERS: MATERIALS**

There are no amendments to this Chapter

## **COTO CHAPTER 5: EARTHWORKS AND PAVEMENT LAYERS: CONSTRUCTION**

### **PART A: SPECIFICATION**

#### **A5.3.8 WORKMANSHIP**

##### **A5.3.8.5 Surface regularity**

Add the following to the 1<sup>st</sup> paragraph:

“The surface regularity shall be assessed on the final prepared layer after all excess fines have been swept off the surface.”

##### **c) By using a profiler**

In the paragraph following Table A3.5.8--6, delete the following: " for payment items \*\*\*  
\_\_\_\_\_", and replace with the following: "for payment items as specified in  
the Contract Documentation".

**COTO CHAPTER 6: CONCRETE LAYERS**

**SECTION 6.1: PAVER LAID CONCRETE LAYERS**

**PART A: SPECIFICATION**

**A6.1.5 MATERIALS**

**A6.1.5.1 Cementitious materials**

*In the 2<sup>nd</sup> paragraph insert:*

“the quantity of supplementary cementitious materials be limited to”, *after* “... may be used subject to”.

**A6.1.6 CONSTRUCTION EQUIPMENT**

**A6.1.6.2 Concrete batching plant**

*In the 1<sup>st</sup> sentence of the 2<sup>nd</sup> paragraph delete the following:*

“Where concrete is supplied by a commercial source outside the direct control of the Engineer”.

**A6.1.8 WORKMANSHIP**

**c) Construction tolerances**

*(vii) Surface regularity*

*Add the following new paragraph:*

“Any adjustment in the payment for the concrete layer will be made by multiplying the full payment value for each 100 m section, (for all the relevant payment items for this work) by the payment adjustment factor derived from Table A9.1.8-3. The payment adjustment shall apply to the total concrete layer width placed over the 100 m sections in question.”

**COTO CHAPTER 7: MAINTENANCE AND REPAIR OF CONCRETE LAYERS**

**SECTION 7.1: REPLACEMENT OF EXISTING JOINT SEALANT**

**PART D: GUARANTEES AND COMPLIANCE CERTIFICATES**

**D7.1.8 WORKMANSHIP**

**D7.1.8.8 Alternative materials and design**

*Add the following to the end of the 1<sup>st</sup> paragraph as part of the 1<sup>st</sup> sentence:*

*"and in addition to the postulated tender".*

**D7.1.8.9 Work on behalf of Employer**

*In the 2<sup>nd</sup> sentence of the 1<sup>st</sup> paragraph delete: "(cost plus 15%)".*

**COTO CHAPTER 8:     PRETREATMENT AND REPAIR OF EXISTING LAYERS**

**SECTION 8.1:           PRIME COAT**

**PART A:    SPECIFICATION**

**A8.1.5     MATERIALS**

**A8.1.5.1    Bituminous material**

*In Table A8.1.5-1 Delete “the excavated area” in the table caption and heading.*

**A8.1.8     WORKMANSHIP**

**A8.1.8.2    Testing**

*Replace the last sentence of the 1<sup>st</sup> paragraph with the following: “Unless agreed in advance and in writing, the Contractor shall only spray when the Engineer’s representative is present.”*

## **COTO CHAPTER 9: ASPHALT LAYERS**

There are no amendments to this Chapter

**COTO CHAPTER 10: SURFACE TREATMENTS**

**SECTION 10.1: GENERAL REQUIREMENTS FOR SURFACE TREATMENTS**

**PART D: GUARANTEES AND COMPLIANCE CERTIFICATES**

**D10.1.5 VISUALLY ASSESSED PROPERTIES**

**D10.1.5.4 Acceptance criteria**

*In note 3 below Table D10.1.5-3, delete “May 2016” and replace with “Latest version”.*

**COTO CHAPTER 11:    ANCILLARY ROAD WORKS**

**SECTION 11.4:            ROAD RESTRAINT SYSTEMS**

**PART C:    MEASUREMENT AND PAYMENT**

| Item | Unit |
|------|------|
|------|------|

|                                                                 |  |
|-----------------------------------------------------------------|--|
| <b>C11.4.2      Performance based vehicle restraint systems</b> |  |
|-----------------------------------------------------------------|--|

*Where the Concrete barrier system is utilised as temporary restraint systems for Traffic Accommodation and scheduled under C1.5 in the Pricing Schedule, the unit of measure shall be metre.month.*

**COTO CHAPTER 12: GEOTECHNICAL APPLICATIONS**

**SECTION 12.6: MECHANICALLY STABILISED EARTH AND GABIONS**

**PART A: SPECIFICATION**

**A12.6.8 WORKMANSHIP**

**A12.6.8.1 MSE Walls**

**b) Concrete facings**

*Replace the letter “W” with “durability” in the first sentence.*

## **COTO CHAPTER 13: STRUCTURES**

### **SECTION 13.4: CONCRETE**

#### **PART A: SPECIFICATION**

##### **A13.4.2 DEFINITIONS**

###### **Fresh phase of concrete**

*Add the following at the end of the definition of “Fresh phase of concrete”:*

“This is also known as the plastic phase.”

*Add the following definition between “Fresh phase of concrete” and “Hardened phase of concrete”:*

**“Hydration or curing phase** – this is concrete that is no longer a semi-liquid but has not yet reached a solid state.”

##### **A13.4.7 EXECUTION OF THE WORKS**

###### **A13.4.7.12 Placing and Compaction**

###### **b) Placing**

*Delete the 3<sup>rd</sup> sentence of the 1<sup>st</sup> paragraph and replace with the following:*

“The Contractor shall not be permitted to pour unless the specific method statement for that pour has been accepted by the Engineer.”

## **COTO CHAPTER 14: REPAIR AND REHABILITATION OF STRUCTURES**

There are no amendments to this Chapter

## **COTO CHAPTER 20: QUALITY ASSURANCE**

### **SECTION 20.1: TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP**

#### **PART A: SPECIFICATION**

##### **A20.1.2 DEFINITIONS**

###### **Independent site laboratory**

*In the definition of “Independent site laboratory”, add the following:*

“Independent Site laboratory in COTO is equivalent to the combined laboratory in the Employer documentation”

##### **A20.1.4 PUBLISHED TEST METHODS**

###### **A20.1.4.7 Testing of bituminous binders**

*Replace: “SABITA PG1 –Series on modified binders “ with:  
“SABITA TG1 –Series on modified binders “.*

##### **A20.1.7 ACCEPTANCE CONTROL BY STATISTICAL JUDGEMENT PRINCIPLES**

###### **A20.1.7.2 Taking samples**

###### **a) Stratified random sampling**

*Add the following new paragraph:*

“Where the SARDS Laboratory module is used, the sampling locations must be as per the software. The Engineer may specify additional sampling locations.”

###### **b) Minimum samples per lot**

*Add the following new paragraph:*

“Where the SARDS Laboratory module is used, the number of samples per lot must be as per the software, as a minimum. The Engineer may specify additional numbers of samples. The Number of samples must be sufficient to meet the requirements of TMH5.”

#### **PART C: MEASUREMENT AND PAYMENT**

##### **C20.1.5 Financial contribution for an independent laboratory**

*Replace reference to: “Independent laboratory” with: “Independent site laboratory”.*

*Add the following new pay item:*

| <b>“Item</b> | <b>Unit</b> |
|--------------|-------------|
|--------------|-------------|

##### **C20.1.6 Payment of independent site laboratory**

|           |                                                          |                     |
|-----------|----------------------------------------------------------|---------------------|
| C20.1.6.1 | Direct payment by contractor .....                       | prime cost (PC) sum |
| a)        | Handling cost and profit in respect of item C20.1.6.1... | percentage (%)      |

The contractor shall pay the appointed site laboratory monthly for the amount as certified by the Engineer.

The charge or mark-up tendered or allowed for is a percentage of the amount actually paid under the prime cost item. The percentage shall cover all the Contractors’ sourcing, handling, profit, and payment of the service provider in providing the services. The Contractor shall forfeit his mark-up when the service provider is not paid in time.”

## **SECTION B: SPECIFICATION DATA**

### **Notes to tenderer:**

- 1. In certain clauses, the Standard Specifications allow a choice to be specified in the Contract Documentation or Project Specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this contract are contained in this Section B: Specification Data.**
- 2. The number of each clause and each payment item in this part of the project specifications follows the numbering format of the COTO standard specifications.**

**COTO CHAPTER 1: GENERAL**

| CH | SEC         | CL            | SUB-CLAUSE                                                             | SPECIFICATION DATA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----|-------------|---------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  |             |               | <b>GENERAL</b>                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    | <b>A1.1</b> |               | <b>GENERAL PREAMBLE</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    |             | <b>A1.1.2</b> | <b>DEFINITIONS</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    |             |               | <b>Conditions of Contract</b>                                          | The General Conditions of Contract (2015) shall apply.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|    |             |               | <b>Site / Site of the Works</b>                                        | The limits of construction is provided in the document                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|    | <b>C1.1</b> |               | <b>GENERAL PREAMBLE</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    | <b>A1.2</b> |               | <b>GENERAL REQUIREMENTS AND PROVISIONS</b>                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    |             | <b>A1.2.3</b> | <b>GENERAL</b>                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    |             |               | <b>A1.2.3.3 Environmental management</b>                               | The requirements of the Environmental Officer is indicated in Section C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|    |             |               | <b>A1.2.3.4 Extension of time for delays caused by rainfall</b>        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    |             |               | <b>c) Method 3 (Critical path method without consequential delays)</b> | Method 3 (Critical path method without consequential delays) is specified. The value of "N" is _____.<br>In calculations of payment for approved extensions of time granted for delays caused by rainfall, payment will be made utilising the applicable payment items for which the unit of measurement is "month" but excluding payment items with negative rates and non-applicable payment items such as pay item C1.3.1.4.                                                                                                                                                          |
|    |             |               | <b>A1.2.3.5 Handing-over of the Site of the Works</b>                  | The conditions for handing-over of the Site of the Works are as follows:<br><br>a) Temporary deviations<br>The maximum length of temporary deviations is 3 km. The total number of temporary deviations allowed at a time is 3.<br><br>b) Routine Maintenance<br>The Contractor shall take over the maintenance responsibility on the date of Access to site but may liaise with the routine maintenance contractor by arranging a transition period immediately after the Access to site to allow sufficient time to muster his resources required for routine maintenance of the road. |
|    |             |               | <b>A1.2.3.9 Monthly reports</b>                                        | Other information to be included in monthly progress reports are as follows:<br>a) Information as required in terms of Conditions of Contract Clause 4.21                                                                                                                                                                                                                                                                                                                                                                                                                                |
|    |             |               | <b>A1.2.3.10 Notices, signs and advertisements</b>                     | Details of the contract sign board is provided in Drawings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|    |             |               | <b>A1.2.3.12 Ownership of assets and disposal of non-usable assets</b> | The Non-usable assets to be disposed by the Contractor is listed in the following disposal plan:<br><br>Disposal plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| CH                | SEC                | CL                   | SUB-CLAUSE                                                              | SPECIFICATION DATA                                                                                                                                                                                                                                                                      |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|--------------------|----------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------|--------------------|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|
|                   |                    |                      |                                                                         | <table><tr><td>Asset description</td><td>Estimated quantity</td><td>Disposal requirement</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>                              |  |  | Asset description | Estimated quantity | Disposal requirement |  |  |  |  |  |  |  |  |  |  |  |  |
| Asset description | Estimated quantity | Disposal requirement |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.2.3.13 Prevention of damage to nearby properties and services</b> | Structures that could be affected by excessive ground vibrations is listed in the following table: <table><tr><td>Structure</td><td>Type</td><td>Location</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table> |  |  | Structure         | Type               | Location             |  |  |  |  |  |  |  |  |  |  |  |  |
| Structure         | Type               | Location             |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      |                                                                         |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.2.3.18 Stakeholder liaison</b>                                    | Additional requirements related to structured engagement with project Stakeholders and affected Communities, as well as guidance on the selection and the enhanced utilisation and development of Targeted Labour and Targeted Enterprises is provided in Section D1000.                |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.2.3.20 Road safety audits</b>                                     | A Work zone traffic management audit as well as a Pre-opening stage road safety audit, shall be carried out.                                                                                                                                                                            |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.2.3.22 Wayleaves/Agreements and Permits</b>                       | The Contractor shall be responsible for applying for the all following wayleaves.                                                                                                                                                                                                       |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    | <b>A1.2.7</b>        | <b>EXECUTION OF THE WORKS</b>                                           |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.2.7.1 Programme of work</b>                                       |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>a) General</b>                                                       | A scheme 2 programme shall apply.                                                                                                                                                                                                                                                       |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>b) Scheme 2</b>                                                      | The programme shall be drawn up or be compatible with Excell.                                                                                                                                                                                                                           |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.2.7.4 Work on, over, under or adjacent to utilities</b>           |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   | <b>A1.3</b>        |                      | <b>CONTRACTOR’S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS</b>          |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    | <b>A1.3.3</b>        | <b>GENERAL</b>                                                          |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.3.3.1 Construction camps</b>                                      |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   | <b>A1.4</b>        |                      | <b>FACILITIES FOR THE ENGINEER</b>                                      |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    | <b>A1.4.3</b>        | <b>GENERAL</b>                                                          |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    | <b>A1.4.7</b>        | <b>EXECUTION OF THE WORKS</b>                                           |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>A1.4.7.1 Offices and laboratories</b>                                |                                                                                                                                                                                                                                                                                         |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>a) General</b>                                                       | The site laboratory shall be supplied with three-phase electricity.                                                                                                                                                                                                                     |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |
|                   |                    |                      | <b>b) Offices</b>                                                       | As per Pricing Schedule                                                                                                                                                                                                                                                                 |  |  |                   |                    |                      |  |  |  |  |  |  |  |  |  |  |  |  |

| CH | SEC         | CL            | SUB-CLAUSE                                                                                       | SPECIFICATION DATA                                                                                                                                                                                                                                     |
|----|-------------|---------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |             |               | c) Laboratories                                                                                  | As per Pricing Schedule                                                                                                                                                                                                                                |
|    |             |               | f) Ablution unit                                                                                 | As per Pricing Schedule                                                                                                                                                                                                                                |
|    |             |               | <b>A1.4.7.2 Housing</b>                                                                          |                                                                                                                                                                                                                                                        |
|    |             |               | a) Prefabricated houses                                                                          | As per Pricing Schedule                                                                                                                                                                                                                                |
|    |             |               | <b>A1.4.7.3 Services</b>                                                                         | As per Pricing Schedule                                                                                                                                                                                                                                |
|    |             |               | b) Water, electricity and gas                                                                    |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.4.7.5 Office staff</b>                                                                     | As per Pricing Schedule                                                                                                                                                                                                                                |
|    | <b>A1.5</b> |               | <b>ACCOMMODATION OF TRAFFIC</b>                                                                  |                                                                                                                                                                                                                                                        |
|    |             | <b>A1.5.3</b> | <b>GENERAL</b>                                                                                   |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.5.3.3 Lane width</b>                                                                       |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.5.3.14 Vertical clearance</b>                                                              |                                                                                                                                                                                                                                                        |
|    |             | <b>A1.5.6</b> | <b>CONSTRUCTION EQUIPMENT</b>                                                                    |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.5.6.1 Traffic control facilities</b>                                                       |                                                                                                                                                                                                                                                        |
|    |             |               | a) Barriers                                                                                      |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.5.6.2 Illuminated traffic signs and safety devices</b>                                     |                                                                                                                                                                                                                                                        |
|    |             |               | d) Sign mounted flashing lights                                                                  |                                                                                                                                                                                                                                                        |
|    |             | <b>A1.5.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                    |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.5.7.3 Accommodation of traffic where the road is constructed in half or partial widths</b> | <p>The length of the half or partial width construction sections where the traffic can only pass in one direction at a time shall not exceed 3,0 km.</p> <p>The number of one-ways sections under construction at any one time shall not exceed 3.</p> |
|    |             |               | <b>A1.5.7.6 Maintenance of existing roads used as detours</b>                                    |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.5.7.10 Construction of temporary deviations</b>                                            |                                                                                                                                                                                                                                                        |
|    |             |               | d) Earthworks and pavement layers for temporary deviations                                       |                                                                                                                                                                                                                                                        |
|    |             |               | e) Surfacing of temporary deviations                                                             |                                                                                                                                                                                                                                                        |
|    | <b>A1.6</b> |               | <b>CLEARING AND GRUBBING</b>                                                                     |                                                                                                                                                                                                                                                        |
|    |             | <b>A1.6.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                    |                                                                                                                                                                                                                                                        |
|    |             |               | <b>A1.6.7.2 Clearing</b>                                                                         |                                                                                                                                                                                                                                                        |
|    | <b>A1.7</b> |               | <b>LOADING AND HAULING</b>                                                                       |                                                                                                                                                                                                                                                        |
|    |             | <b>A1.7.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                    | The Contractor must provide the Engineer with the certified carrying capacity of each vehicle before any construction materials can be transported.                                                                                                    |

**COTO CHAPTER 2: SERVICES**

| CH | SEC         | CL            | SUB-CLAUSE                                                                                     | SPECIFICATION DATA |
|----|-------------|---------------|------------------------------------------------------------------------------------------------|--------------------|
| 2  |             |               | <b>SERVICES</b>                                                                                |                    |
|    | <b>A2.1</b> |               | <b>GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES</b>                                         |                    |
|    |             | <b>A2.1.1</b> | <b>SCOPE</b>                                                                                   |                    |
|    |             |               | <b>A2.1.1.1 Installation of new services</b>                                                   |                    |
|    |             |               | <b>A2.1.1.2 Location, identification, protection and relocation of existing services</b>       |                    |
|    |             | <b>A2.1.2</b> | <b>DEFINITIONS</b>                                                                             |                    |
|    |             | <b>A2.1.3</b> | <b>GENERAL</b>                                                                                 |                    |
|    |             |               | <b>A2.1.3.1 Installation of new services</b>                                                   |                    |
|    |             |               | <b>A2.1.3.2 Location, identification, protection and relocation of existing services</b>       |                    |
|    |             |               | <b>a) Existing as-built records</b>                                                            |                    |
|    |             |               | <b>b) Location of existing services</b>                                                        |                    |
|    |             |               | <b>d) Protection of services</b>                                                               |                    |
|    |             |               | <i>(i) Service owners</i>                                                                      |                    |
|    |             |               | <i>(ii) Protection</i>                                                                         |                    |
|    |             |               | <i>(iv) Relocation</i>                                                                         |                    |
|    |             |               | <b>A2.1.3.3 Safety, Method Statements, safeguarding the works and accommodation of traffic</b> |                    |
|    |             |               | <b>a) Safety and Method Statements</b>                                                         |                    |
|    |             |               | <b>c) Accommodation of traffic</b>                                                             |                    |
|    |             |               | <b>A2.1.3.5 Programming for services</b>                                                       |                    |
|    |             |               | <b>a) Trenching and installation sequence</b>                                                  |                    |
|    |             |               | <b>A2.1.3.6 Provision of record drawings and details</b>                                       |                    |
|    |             |               | <b>A2.1.3.9 Limitations and restrictions</b>                                                   |                    |
|    |             |               | <b>c) Installation under special conditions</b>                                                |                    |
|    |             |               | <b>e) Working widths</b>                                                                       |                    |
|    |             | <b>A2.1.4</b> | <b>DESIGN BY CONTRACTOR /</b>                                                                  |                    |

| CH | SEC | CL            | SUB-CLAUSE                                                                              | SPECIFICATION DATA |
|----|-----|---------------|-----------------------------------------------------------------------------------------|--------------------|
|    |     |               | <b>PERFORMANCE<br/>BASED SYSTEMS</b>                                                    |                    |
|    |     |               | <b>A2.1.4.1 Temporary<br/>works</b>                                                     |                    |
|    |     |               | <b>A2.1.4.2 Alternative<br/>designs</b>                                                 |                    |
|    |     |               | <b>b) Alternative design<br/>approvals</b>                                              |                    |
|    |     |               | <b>A2.1.4.3 Designs</b>                                                                 |                    |
|    |     | <b>A2.1.5</b> | <b>MATERIALS</b>                                                                        |                    |
|    |     |               | <b>A2.1.5.1 Trench<br/>backfill material</b>                                            |                    |
|    |     |               | <b>A2.1.5.2 Soil cement<br/>and stabilised trench<br/>backfill material</b>             |                    |
|    |     |               | <b>a) Soil cement backfill</b>                                                          |                    |
|    |     |               | <b>b) Cement stabilised<br/>backfill</b>                                                |                    |
|    |     | <b>A2.1.6</b> | <b>CONSTRUCTION<br/>EQUIPMENT</b>                                                       |                    |
|    |     |               | <b>A2.1.6.1 Excavation<br/>equipment</b>                                                |                    |
|    |     | <b>A2.1.7</b> | <b>EXECUTION OF THE<br/>WORKS</b>                                                       |                    |
|    |     |               | <b>A2.1.7.1 Trenching for<br/>Services</b>                                              |                    |
|    |     |               | <b>f) Safe placement of<br/>excavated material</b>                                      |                    |
|    |     |               | <b>h) Excavation</b>                                                                    |                    |
|    |     |               | <b>j) Excavation using<br/>Labour Enhanced<br/>Construction Methods</b>                 |                    |
|    |     |               | <b>k) Excavations outside<br/>the normal trench<br/>profile</b>                         |                    |
|    |     |               | <b>l) Timbering and<br/>shoring</b>                                                     |                    |
|    |     |               | <i>(ii) Contract Specific<br/>Shoring Requirements</i>                                  |                    |
|    |     |               | <b>m) Soil cement<br/>backfilling</b>                                                   |                    |
|    |     |               | <b>n) Erosion protection<br/>with sandbags</b>                                          |                    |
|    |     |               | <b>p) Preparation of the<br/>bottom of trenches</b>                                     |                    |
|    |     |               | <b>r) Dealing with water</b>                                                            |                    |
|    |     |               | <i>(i) Contractor's<br/>obligations for dealing<br/>with water</i>                      |                    |
|    |     |               | <b>A2.1.7.2 Reinstatement<br/>of existing roads and<br/>existing road furniture</b>     |                    |
|    |     |               | <b>a) General</b>                                                                       |                    |
|    |     |               | <b>b) Reinstatement of<br/>existing road<br/>carriageways and<br/>other paved areas</b> |                    |

| CH | SEC  | CL      | SUB-CLAUSE                                                                                         | SPECIFICATION DATA                                                                                                                                                                                                                               |
|----|------|---------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |      |         | d) Reinstatement of unpaved areas                                                                  |                                                                                                                                                                                                                                                  |
|    |      |         | A2.1.7.3 Railway reserves, bridge and other special crossings                                      |                                                                                                                                                                                                                                                  |
|    |      |         | A2.1.7.6 Ownership, removal and disposal of existing service materials                             | " Contractor shall become the owner of specific recovered service materials and shall be responsible for the disposal of the materials and for providing the Engineer with a full record of the disposal of the materials for control purposes". |
|    |      | A2.1.8  | WORKMANSHIP                                                                                        |                                                                                                                                                                                                                                                  |
|    |      |         | A2.1.8.2 Compaction                                                                                |                                                                                                                                                                                                                                                  |
|    |      |         | a) Relative density compaction control                                                             |                                                                                                                                                                                                                                                  |
|    |      |         | (ii) Areas subjected to vehicle traffic loads or within the road prism                             |                                                                                                                                                                                                                                                  |
|    |      |         | c) DCP compaction control                                                                          |                                                                                                                                                                                                                                                  |
|    | B2.1 |         | GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES<br>PART B: LABOUR ENHANCEMENT                      |                                                                                                                                                                                                                                                  |
|    |      | B2.1.1  | SCOPE                                                                                              |                                                                                                                                                                                                                                                  |
|    | C2.1 |         | GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES<br>PART C: MEASUREMENT AND PAYMENT                 |                                                                                                                                                                                                                                                  |
|    |      |         | (ii) Notes on measurement and pay items                                                            |                                                                                                                                                                                                                                                  |
|    |      | C2.1.6  | Trench excavation (in soft material)                                                               |                                                                                                                                                                                                                                                  |
|    |      | C2.1.8  | Excavations outside the normal trench profile                                                      |                                                                                                                                                                                                                                                  |
|    |      | C2.1.9  | Trench excavation using labour enhanced construction methods                                       |                                                                                                                                                                                                                                                  |
|    |      | C2.1.10 | Excavation in tunnels exceeding 3,0 m in length in:                                                |                                                                                                                                                                                                                                                  |
|    |      | C2.1.16 | Subsurface drains in trench bottoms (Contract Documentation reference or drawing number indicated) |                                                                                                                                                                                                                                                  |
|    |      | C2.1.17 | Removal and disposal of spoil material from trench excavations:                                    |                                                                                                                                                                                                                                                  |

| CH | SEC         | CL              | SUB-CLAUSE                                                                                                                           | SPECIFICATION DATA                                                                                                                                                                                                          |
|----|-------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |             | <b>C2.1.18</b>  | <b>Timbering, strutting and shoring</b>                                                                                              |                                                                                                                                                                                                                             |
|    |             | <b>C2.1.20</b>  | <b>Specified temporary works to control water inflow (state reference in Contract Documentation or indicate drawing number etc.)</b> |                                                                                                                                                                                                                             |
|    | <b>D2.1</b> |                 | <b>GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES<br/>PART D:<br/>GUARANTEES AND COMPLIANCE CERTIFICATES</b>                        |                                                                                                                                                                                                                             |
|    |             | <b>D2.1.1.1</b> | <b>Proprietary products and materials (Guarantees and compliance certificates)</b>                                                   |                                                                                                                                                                                                                             |
|    | <b>A2.2</b> |                 | <b>DRY SERVICES</b>                                                                                                                  |                                                                                                                                                                                                                             |
|    |             | <b>A2.2.1</b>   | <b>SCOPE</b>                                                                                                                         |                                                                                                                                                                                                                             |
|    |             |                 | <b>A2.2.1.1 General note</b>                                                                                                         | In certain SANS documents referred to in this Section the term "specified in the scope of work" is used. For the purposes of this specification the term shall be deemed to mean "specified in the Contract Documentation". |
|    |             | <b>A2.2.5</b>   | <b>MATERIALS</b>                                                                                                                     |                                                                                                                                                                                                                             |
|    |             |                 | <b>A2.2.5.1 Ducts and sleeves</b>                                                                                                    |                                                                                                                                                                                                                             |
|    |             |                 | <b>b) High Density Polyethylene (HDPE) ducts</b>                                                                                     |                                                                                                                                                                                                                             |
|    |             |                 | <i>(i) HDPE ducts installed by trenching</i>                                                                                         |                                                                                                                                                                                                                             |
|    |             |                 | <i>(ii) HDPE ducts installed by drilling</i>                                                                                         |                                                                                                                                                                                                                             |
|    |             |                 | <b>c) Concrete pipe ducts</b>                                                                                                        |                                                                                                                                                                                                                             |
|    |             |                 | <b>e) Other duct materials</b>                                                                                                       |                                                                                                                                                                                                                             |
|    |             |                 | <b>g) End caps or plugs</b>                                                                                                          |                                                                                                                                                                                                                             |
|    |             |                 | <b>h) Draw wires and marker tapes</b>                                                                                                |                                                                                                                                                                                                                             |
|    |             |                 | <b>A2.2.5.2 Bedding</b>                                                                                                              |                                                                                                                                                                                                                             |
|    |             |                 | <b>A2.2.5.3 Backfill</b>                                                                                                             |                                                                                                                                                                                                                             |
|    |             |                 | <b>a) Backfill for trenched (excluding micro or mini trenching)</b>                                                                  |                                                                                                                                                                                                                             |
|    |             |                 | <b>b) Backfill for micro or mini trenching</b>                                                                                       |                                                                                                                                                                                                                             |
|    |             |                 | <b>A2.2.5.4 Cable duct markers</b>                                                                                                   |                                                                                                                                                                                                                             |
|    |             |                 | <b>A2.2.5.5 Concrete</b>                                                                                                             |                                                                                                                                                                                                                             |
|    |             |                 | <b>A2.2.5.7 Handhole, manhole and access</b>                                                                                         |                                                                                                                                                                                                                             |

| CH | SEC         | CL            | SUB-CLAUSE                                                                         | SPECIFICATION DATA |
|----|-------------|---------------|------------------------------------------------------------------------------------|--------------------|
|    |             |               | <b>chamber types and covers</b>                                                    |                    |
|    |             |               | <b>a) Handhole, manhole and access chamber</b>                                     |                    |
|    |             |               | <i>(i) Telecommunications handholes, manholes and access chambers</i>              |                    |
|    |             |               | <i>(iv) Other handholes, manholes and access chambers</i>                          |                    |
|    |             |               | <b>b) Covers and frames</b>                                                        |                    |
|    |             |               | <i>(i) Telecommunications covers and frames</i>                                    |                    |
|    |             |               | <i>(ii) Other covers and frames</i>                                                |                    |
|    |             | <b>A2.2.7</b> | <b>EXECUTION OF THE WORKS</b>                                                      |                    |
|    |             |               | <b>A2.2.7.2 Duct installation by methods other than by micro or mini trenching</b> |                    |
|    |             |               | <b>a) Trench widths for duct installations</b>                                     |                    |
|    |             |               | <b>b) Bedding and compaction of bedding</b>                                        |                    |
|    |             |               | <b>d) Concrete bedding and encasement</b>                                          |                    |
|    |             |               | <i>(i) Concrete bedding</i>                                                        |                    |
|    |             |               | <i>(ii) Concrete encasement</i>                                                    |                    |
|    |             |               | <b>A2.2.7.4 Duct markers</b>                                                       |                    |
|    |             |               | <b>b) Route markers</b>                                                            |                    |
|    |             |               | <b>c) Road crossing markers</b>                                                    |                    |
|    |             |               | <b>A2.2.7.6 Duct installation by micro and mini trenching</b>                      |                    |
|    |             | <b>A2.2.8</b> | <b>WORKMANSHIP</b>                                                                 |                    |
|    |             |               | <b>A2.2.8.2 Proving ducts</b>                                                      |                    |
|    |             |               | <b>a) Standard proving requirements</b>                                            |                    |
|    |             |               | <b>b) Other duct integrity requirements</b>                                        |                    |
|    | <b>C2.2</b> |               | <b>DRY SERVICES<br/>PART C:<br/>MEASUREMENT AND PAYMENT</b>                        |                    |
|    |             | <b>C2.2.6</b> | <b>Duct accessories (markers, marking, draw wires and end caps etc.)</b>           |                    |
|    |             | <b>C2.2.8</b> | <b>Covers and frames for duct handholes, manholes and access chambers</b>          |                    |
|    |             | <b>C2.2.9</b> | <b>Install duct handhole, manhole and access</b>                                   |                    |

| CH | SEC  | CL     | SUB-CLAUSE                                                                       | SPECIFICATION DATA                                                                                                                                                                                                          |
|----|------|--------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |      |        | chamber covers and frames provided by others                                     |                                                                                                                                                                                                                             |
|    | D2.2 |        | DRY SERVICES<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES                |                                                                                                                                                                                                                             |
|    |      | D2.2.2 | WARRANTIES FOR PRODUCT OR ELEMENT DESIGN AND INSTALLATION OF PROPRIETARY SYSTEMS |                                                                                                                                                                                                                             |
|    |      | D2.2.3 | PERFORMANCE SPECIFICATIONS                                                       |                                                                                                                                                                                                                             |
|    | A2.3 |        | WET SERVICES                                                                     |                                                                                                                                                                                                                             |
|    |      | A2.3.1 | SCOPE                                                                            |                                                                                                                                                                                                                             |
|    |      |        | A2.3.1.1 General note                                                            | In certain SANS documents referred to in this Section the term “specified in the scope of work” is used. For the purposes of this specification the term shall be deemed to mean “specified in the Contract Documentation”. |
|    |      | A2.3.5 | MATERIALS                                                                        |                                                                                                                                                                                                                             |
|    |      |        | A2.3.5.1 Sewers                                                                  |                                                                                                                                                                                                                             |
|    |      |        | b) Manholes and chambers                                                         |                                                                                                                                                                                                                             |
|    |      |        | A2.3.5.3 Bedding, fill blanket and backfill material for sewers and water mains  |                                                                                                                                                                                                                             |
|    |      |        | A2.3.5.4 Marker posts                                                            |                                                                                                                                                                                                                             |
|    |      | A2.3.7 | EXECUTION OF THE WORKS                                                           |                                                                                                                                                                                                                             |
|    |      |        | A2.3.7.3 Water mains                                                             |                                                                                                                                                                                                                             |
|    |      |        | e) Valve and hydrant chambers and manholes                                       |                                                                                                                                                                                                                             |
|    |      | A2.3.8 | WORKMANSHIP                                                                      |                                                                                                                                                                                                                             |
|    |      |        | A2.3.8.2 Sewers                                                                  |                                                                                                                                                                                                                             |
|    |      |        | a) Tolerances                                                                    |                                                                                                                                                                                                                             |
|    |      |        | b) Construction tests                                                            |                                                                                                                                                                                                                             |
|    |      |        | (i) General                                                                      |                                                                                                                                                                                                                             |
|    |      |        | (iii) Camera inspections                                                         |                                                                                                                                                                                                                             |
|    |      |        | A2.3.8.3 Water mains                                                             |                                                                                                                                                                                                                             |
|    |      |        | a) Tolerances                                                                    |                                                                                                                                                                                                                             |
|    |      |        | b) Construction tests                                                            |                                                                                                                                                                                                                             |
|    | C2.3 |        | WET SERVICES<br>PART C:<br>MEASUREMENT AND PAYMENT                               |                                                                                                                                                                                                                             |
|    |      | C2.3.5 | Manholes, inspection chambers and                                                |                                                                                                                                                                                                                             |

| CH | SEC  | CL                 | SUB-CLAUSE                                                                     | SPECIFICATION DATA                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----|------|--------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |      |                    | cleaning eyes for sewers                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | C2.3.6             | Covers and frames for sewer manholes, inspection chambers and other structures |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | C2.3.7             | Sewer accessories (anchor blocks, marker posts, plug stoppers etc.)            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | C2.3.12 to C2.3.20 |                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | C2.3.21 to C2.3.36 | Measurement and Payment Items for Water Mains (Items C2.3.21 to C2.3.36)       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | C2.3.26            | Supplying and installing pipes, specials and valves on short pipe runs         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | C2.3.27            | Extra over item C2.3.21 for encasing (wrapping) joints                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    | D2.3 |                    | WET SERVICES<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | D2.3.1             | SCOPE                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    | A2.4 |                    | ENERGY AND OTHER SERVICES                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | A2.4.1             | SCOPE                                                                          | <p>The purpose of Section A2.4 is therefore partly to provide a structured framework for the Contract Documentation for civil construction work related to energy services or any other types of services not dealt with elsewhere in Chapter 2.</p> <p>In certain SANS documents referred to in this section the term “specified in the scope of work” is used. For the purposes of this specification the term shall be deemed to mean “specified in the Contract Documentation</p> |
|    |      | A2.4.5             | MATERIALS                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      |                    | A2.4.5.1 General                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      |                    | A2.4.5.3 Backfill for electric power cables                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      |                    | A2.4.5.5 Electric power concrete slab protection                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      |                    | A2.4.5.6 Electric power cable markers                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      |                    | A2.4.5.7 Polyethylene pipes for gaseous fuels                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|    |      | A2.4.6             | CONSTRUCTION EQUIPMENT                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| CH | SEC         | CL            | SUB-CLAUSE                                                                              | SPECIFICATION DATA |
|----|-------------|---------------|-----------------------------------------------------------------------------------------|--------------------|
|    |             |               | <b>A2.4.6.1 General</b>                                                                 |                    |
|    |             | <b>A2.4.7</b> | <b>EXECUTION OF THE WORKS</b>                                                           |                    |
|    |             |               | <b>A2.4.7.1 General</b>                                                                 |                    |
|    |             |               | <b>A2.4.7.2 Trenching for electric power cables</b>                                     |                    |
|    |             |               | <b>b) Trench dimensions</b>                                                             |                    |
|    |             |               | <i>(i) Trench width</i>                                                                 |                    |
|    |             |               | <i>(ii) Trench Depth</i>                                                                |                    |
|    |             |               | <b>A2.4.7.7 Electric power cable concrete bedding</b>                                   |                    |
|    |             |               | <b>A2.4.7.8 Electric Power cables and markers</b>                                       |                    |
|    |             |               | <b>A2.4.7.9 Steel supporting structures</b>                                             |                    |
|    |             |               | <b>A2.4.7.11 Polyethylene pipes for gaseous fuels</b>                                   |                    |
|    |             | <b>A2.4.8</b> | <b>WORKMANSHIP</b>                                                                      |                    |
|    |             |               | <b>A2.4.8.1 General</b>                                                                 |                    |
|    | <b>C2.4</b> |               | <b>ENERGY AND OTHER SERVICES<br/>PART C:<br/>MEASUREMENT AND PAYMENT</b>                |                    |
|    |             | <b>C2.4.3</b> | <b>Cable laying accessories (warning tape, protection slabs, markers etc.)</b>          |                    |
|    | <b>D2.4</b> |               | <b>ENERGY AND OTHER SERVICES<br/>PART D:<br/>GUARANTEES AND COMPLIANCE CERTIFICATES</b> |                    |
|    |             | <b>D2.4.1</b> | <b>Scope (Guarantees and compliance certificates)</b>                                   |                    |

**COTO CHAPTER 3: DRAINAGE**

| CH | SEC         | CL            | SUB-CLAUSE                                                                             | SPECIFICATION DATA |
|----|-------------|---------------|----------------------------------------------------------------------------------------|--------------------|
| 3  |             |               | <b>DRAINAGE</b>                                                                        |                    |
|    | <b>A3.1</b> |               | <b>DRAINS</b>                                                                          |                    |
|    |             | <b>A3.1.4</b> | <b>DESIGN BY CONTRACTOR/PERFORMANCE</b>                                                |                    |
|    |             | <b>A3.1.5</b> | <b>MATERIALS</b>                                                                       |                    |
|    |             |               | <b>A3.1.5.2 Subsoil Drainage Materials</b><br><b>a) Pipes</b>                          |                    |
|    |             | <b>A3.1.7</b> | <b>EXECUTION OF THE WORKS</b>                                                          |                    |
|    |             |               | <b>A3.1.7.4 Subsoil drainage</b><br><b>a) Construction of subsoil drainage systems</b> |                    |
|    |             |               | <i>(ii) With polymer film lining to trenches for subsoil drainage systems</i>          |                    |
|    |             |               | <i>(v) With alternative drainage systems</i>                                           |                    |
|    |             |               | <b>A3.1.7.5 Manholes, outlet structures and cleaning eyes</b>                          |                    |
|    | <b>B3.1</b> |               | <b>DRAINS</b>                                                                          |                    |
|    |             | <b>B3.1.6</b> | <b>CONSTRUCTION EQUIPMENT</b>                                                          |                    |
|    | <b>D3.1</b> |               | <b>DRAINS</b>                                                                          |                    |
|    | <b>A3.2</b> |               | <b>CULVERTS</b>                                                                        |                    |
|    |             | <b>A3.2.3</b> | <b>GENERAL</b>                                                                         |                    |
|    |             |               | <b>A3.2.3.1 Types of culverts</b>                                                      |                    |
|    |             | <b>A3.2.4</b> | <b>DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS</b>                                |                    |
|    |             | <b>A3.2.5</b> | <b>MATERIALS</b>                                                                       |                    |
|    |             |               | <b>A3.2.5.2 Culvert materials</b>                                                      |                    |
|    |             |               | <b>h) Protective coating for metal culverts</b>                                        |                    |
|    |             |               | <b>j) Alternative culvert materials</b>                                                |                    |
|    |             | <b>A3.2.7</b> | <b>EXECUTION OF THE WORKS</b>                                                          |                    |
|    |             |               | <b>A3.2.7.4 Unsuitable founding conditions</b>                                         |                    |
|    |             |               | <b>A3.2.7.14 Sleeving or lining of existing culverts</b>                               |                    |
|    | <b>B3.2</b> |               | <b>CULVERTS</b>                                                                        |                    |
|    |             | <b>B3.2.4</b> | <b>DESIGN BY CONTRACTOR /</b>                                                          |                    |

| CH | SEC  | CL      | SUB-CLAUSE                                                                                                                                                                                                                  | SPECIFICATION DATA |
|----|------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
|    |      |         | PERFORMANCE<br>BASED SYSTEMS                                                                                                                                                                                                |                    |
|    | D3.2 |         | CULVERTS                                                                                                                                                                                                                    |                    |
|    | A3.3 |         | CONCRETE KERBING<br>AND CHANNELING,<br>ASPHALT BERMS,<br>CHUTES, DOWNPIPES,<br>AS WELL AS<br>CONCRETE, STONE<br>PITCHED AND<br>GABION LININGS FOR<br>OPEN DRAINS                                                            |                    |
|    |      | A.3.3.4 | DESIGN BY<br>CONTRACTOR /<br>PERFORMANCE<br>BASED SYSTEMS                                                                                                                                                                   |                    |
|    |      | A3.3.5  | MATERIALS                                                                                                                                                                                                                   |                    |
|    |      |         | A3.3.5.2 Drainage<br>structure materials                                                                                                                                                                                    |                    |
|    |      |         | d) Joint sealant                                                                                                                                                                                                            |                    |
|    |      | A3.3.7  | EXECUTION OF THE<br>WORKS                                                                                                                                                                                                   |                    |
|    |      |         | A3.3.7.1 Drainage<br>structures                                                                                                                                                                                             |                    |
|    |      |         | a) Prefabricated<br>concrete kerbing and<br>channelling                                                                                                                                                                     |                    |
|    |      |         | f) Cast in situ chutes<br>on cut slopes                                                                                                                                                                                     |                    |
|    |      |         | i) Stone pitched open<br>drains                                                                                                                                                                                             |                    |
|    | B3.3 |         | CONCRETE KERBING<br>AND CHANNELING,<br>ASPHALT BERMS,<br>CHUTES, DOWNPIPES,<br>AS WELL AS<br>CONCRETE, STONE<br>PITCHED AND<br>GABION LININGS FOR<br>OPEN DRAINS                                                            |                    |
|    |      | B3.3.4  | DESIGN BY<br>CONTRACTOR /<br>PERFORMANCE<br>BASED SYSTEMS                                                                                                                                                                   |                    |
|    | D3.3 |         | CONCRETE KERBING<br>AND CHANNELING,<br>ASPHALT BERMS,<br>CHUTES, DOWNPIPES,<br>AS WELL AS<br>CONCRETE, STONE<br>PITCHED AND<br>GABION LININGS FOR<br>OPEN DRAINS<br>PART D:<br>GUARANTEES AND<br>COMPLIANCE<br>CERTIFICATES |                    |

**COTO CHAPTER 4: EARTHWORKS AND PAVEMENT LAYERS: MATERIALS**

| CH       | SEC         | CL            | SUB-CLAUSE                                                                                      | SPECIFICATION DATA                                      |
|----------|-------------|---------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <b>4</b> |             |               | <b>EARTHWORKS AND PAVEMENT LAYERS: MATERIALS</b>                                                |                                                         |
|          | <b>A4.1</b> |               | <b>BORROW MATERIALS</b>                                                                         |                                                         |
|          |             | <b>A4.1.3</b> | <b>GENERAL</b>                                                                                  |                                                         |
|          |             |               | <b>A4.1.3.1 Employer identified borrow pits and quarries</b>                                    |                                                         |
|          |             |               | <b>A4.1.3.2 Contractor identified borrow pits and quarries</b>                                  |                                                         |
|          |             |               | <b>A4.1.3.4 Contractor prepared plans for borrow materials</b>                                  |                                                         |
|          |             | <b>A4.1.5</b> | <b>MATERIALS</b>                                                                                |                                                         |
|          |             |               | <b>A4.1.5.4 Sand, normal and coarse fill material in the earthworks layers (Table A4.1.5-2)</b> |                                                         |
|          |             |               | <b>A4.1.5.5 Rock fill material in the earthworks layers</b>                                     |                                                         |
|          |             | <b>A4.1.7</b> | <b>EXECUTION OF WORKS</b>                                                                       |                                                         |
|          |             |               | <b>A4.1.7.1 Haul and access roads</b>                                                           |                                                         |
|          |             |               | <b>c) Construction requirements of new temporary unsealed roads</b>                             |                                                         |
|          |             |               | <b>d) Reinstatement of the temporary unsealed roads</b>                                         |                                                         |
|          |             |               | <b>A4.1.7.2 Borrow pit and Quarry operations</b>                                                |                                                         |
|          |             |               | <b>a) General control at the borrow pits and quarries</b>                                       |                                                         |
|          |             |               | <b>b) Classes of excavations</b>                                                                |                                                         |
|          |             |               | <i>(i) Soft excavation</i>                                                                      | The reference construction equipment shall be TLB       |
|          |             |               | <i>(iv) Hard excavation</i>                                                                     | The reference construction equipment shall be Excavator |
|          |             |               | <b>g) Selection and excavation of material in borrow pits</b>                                   |                                                         |
|          |             |               | <b>h) Selection and excavation of material in quarries</b>                                      |                                                         |
|          |             |               | <b>i) Use of the borrow material</b>                                                            |                                                         |
|          |             |               | <b>m) Closing of the borrow pits and quarries</b>                                               |                                                         |
|          |             |               | <b>A4.1.7.3 Stockpiles</b>                                                                      |                                                         |

| CH | SEC  | CL      | SUB-CLAUSE                                                                               | SPECIFICATION DATA |
|----|------|---------|------------------------------------------------------------------------------------------|--------------------|
|    |      |         | b) Stockpiling of the material                                                           |                    |
|    |      |         | c) Reinstatement of stockpiles site                                                      |                    |
|    | C4.1 |         | BORROW MATERIALS<br>PART C:<br>MEASUREMENT AND<br>PAYMENT                                |                    |
|    |      | C4.1.19 | Excavating hard material                                                                 |                    |
|    | D4.1 |         | BORROW MATERIALS<br>PART D:<br>GUARANTEES AND<br>COMPLIANCE<br>CERTIFICATES              |                    |
|    | A4.2 |         | CUT MATERIALS                                                                            |                    |
|    |      | A4.2.7  | EXECUTION OF<br>WORKS                                                                    |                    |
|    |      |         | A4.2.7.1 Excavation operations                                                           |                    |
|    |      |         | a) Control at the cuttings, designated excavations and box cuts                          |                    |
|    |      |         | b) Classes of excavation                                                                 |                    |
|    |      |         | h) Excavation of material in cuttings                                                    |                    |
|    |      |         | i) Excavation of material in box cuts                                                    |                    |
|    |      |         | j) Excavation of material in designated excavations                                      |                    |
|    |      |         | k) Selection and the use of the cut material                                             |                    |
|    |      |         | n) Finishing of the side slopes of cuttings and designated excavations ( <i>para 1</i> ) |                    |
|    | D4.2 |         | CUT MATERIALS<br>PART D:<br>GUARANTEES AND<br>COMPLIANCE<br>CERTIFICATES                 |                    |
|    | A4.3 |         | EXISTING ROAD MATERIALS                                                                  |                    |
|    |      | A4.3.3  | GENERAL                                                                                  |                    |
|    |      |         | A4.3.3.1 Employer identified existing road materials                                     |                    |
|    |      | A4.3.5  | MATERIALS                                                                                |                    |
|    |      |         | A4.3.5.2 Reclaimed Asphalt Material                                                      |                    |
|    |      |         | A4.3.5.3 Bituminous Seal surfacings                                                      |                    |
|    |      | A4.3.7  | EXECUTION OF THE WORKS                                                                   |                    |
|    |      |         | A4.3.7.4 Milling                                                                         |                    |

| CH | SEC  | CL     | SUB-CLAUSE                                                                      | SPECIFICATION DATA |
|----|------|--------|---------------------------------------------------------------------------------|--------------------|
|    |      |        | A4.3.7.7 Excavation of crushed stone, macadam, cemented and gravel materials    |                    |
|    |      |        | A4.3.7.9 Removal of existing pavement blocks                                    |                    |
|    |      |        | A4.3.7.12 Stockpiling of material                                               |                    |
|    |      |        | a) Preparation of the stockpile site                                            |                    |
|    | D4.3 |        | EXISTING ROAD MATERIALS PART D: GUARANTEES AND COMPLIANCE CERTIFICATES          |                    |
|    | A4.4 |        | COMMERCIAL MATERIALS                                                            |                    |
|    |      | A4.4.3 | GENERAL                                                                         |                    |
|    |      |        | A4.4.3.1 Employer identified commercial materials                               |                    |
|    |      |        | a) Materials from commercial suppliers                                          |                    |
|    |      |        | b) Materials from private or non-commercial suppliers                           |                    |
|    |      |        | c) Materials from the Employer's own sources                                    |                    |
|    |      | A4.4.5 | MATERIALS                                                                       |                    |
|    |      |        | A4.4.5.1 Earthworks and pavement layer materials                                |                    |
|    |      |        | A4.4.5.4 Non-traditional stabilising or soil treatment agents ( <i>para 1</i> ) |                    |
|    | C4.4 |        | COMMERCIAL MATERIALS PART C: MEASUREMENT AND PAYMENT                            |                    |
|    |      | C4.4.5 | Bituminous stabilising agents                                                   |                    |
|    | D4.4 |        | COMMERCIAL MATERIALS PART D: GUARANTEES AND COMPLIANCE CERTIFICATES             |                    |
|    |      | D4.4.4 | FUNCTIONAL PERFORMANCE ASSESSMENTS                                              |                    |
|    |      | D4.4.5 | VISUALLY ASSESSED PROPERTIES                                                    |                    |
|    |      | D4.4.6 | INSTRUMENTALLY ASSESSED PROPERTIES                                              |                    |
|    |      | D4.4.7 | EVALUATION FOR ACCEPTANCE                                                       |                    |

| CH | SEC  | CL      | SUB-CLAUSE                                                           | SPECIFICATION DATA |
|----|------|---------|----------------------------------------------------------------------|--------------------|
|    |      | D4.4.8  | ADDITIONAL PROCEDURES TO BE ADOPTED IN THE EVENT OF FAILURE          |                    |
|    |      | D4.4.9  | NOTIFICATION OF REMEDIAL WORK                                        |                    |
|    |      | D4.4.10 | REMEDIAL WORKS                                                       |                    |
|    | A4.5 |         | ALTERNATIVE MATERIALS                                                |                    |
|    |      | A4.5.3  | GENERAL                                                              |                    |
|    |      | A4.5.5  | MATERIALS                                                            |                    |
|    |      |         | A4.5.5.3 Industrial operations material                              |                    |
|    |      |         | a) Slag from the production of ferrous and non-ferrous materials     |                    |
|    |      | A4.5.8  | WORKMANSHIP                                                          |                    |
|    | D4.5 |         | ALTERNATIVE MATERIALS PART D: GUARANTEES AND COMPLIANCE CERTIFICATES |                    |

**COTO CHAPTER 5: EARTHWORKS AND PAVEMENT LAYERS: CONSTRUCTION**

| CH | SEC  | CL     | SUB-CLAUSE                                                | SPECIFICATION DATA |
|----|------|--------|-----------------------------------------------------------|--------------------|
| 5  |      |        | <b>EARTHWORKS AND PAVEMENT LAYERS: CONSTRUCTION</b>       |                    |
|    | A5.1 |        | <b>ROADBED</b>                                            |                    |
|    |      | A5.1.2 | <b>DEFINITIONS</b>                                        |                    |
|    |      |        | Batter                                                    |                    |
|    |      |        | Roller-pass (high-energy impact compactor or roller HEIC) |                    |
|    |      | A5.1.3 | <b>GENERAL</b>                                            |                    |
|    |      |        | A5.1.3.1 Roadbed material Investigation                   |                    |
|    |      | A5.1.5 | <b>MATERIALS</b>                                          |                    |
|    |      |        | A5.1.5.2 Topsoil                                          |                    |
|    |      |        | A5.1.5.3 Collapsing soil material                         |                    |
|    |      | A5.1.6 | <b>CONSTRUCTION EQUIPMENT</b>                             |                    |
|    |      | A5.1.7 | <b>EXECUTION OF WORKS</b>                                 |                    |
|    |      |        | A5.1.7.1 Clearing and grubbing                            |                    |
|    |      |        | A5.1.7.2 Removal and conservation of topsoil from roadbed |                    |
|    |      |        | A5.1.7.3 Normal roadbed treatment                         |                    |
|    |      |        | a) Construction overview                                  |                    |
|    |      |        | b) Removal of unsuitable roadbed material                 |                    |
|    |      |        | c) Percentage of Max Dry density (MDD)                    |                    |
|    |      |        | e) Compaction of collapsible soil                         |                    |
|    |      |        | (i) General                                               |                    |
|    |      |        | (ii) Soil collapse construction                           |                    |
|    |      |        | (iii) Non wetting-up roadbed collapse                     |                    |
|    |      |        | (iv) Wetting-up roadbed collapse                          |                    |
|    |      |        | f) Hard material                                          |                    |
|    |      |        | (i) In situ treatment by ripping                          |                    |
|    |      |        | (ii) In situ treatment by drilling and rock breaking      |                    |
|    |      |        | g) Inactive clay and normal clay                          |                    |
|    |      |        | (i) Material modification                                 |                    |
|    |      |        | (ii) Lime modification                                    |                    |
|    |      |        | (iii) Removal of material                                 |                    |

| CH | SEC         | CL             | SUB-CLAUSE                                                                 | SPECIFICATION DATA |
|----|-------------|----------------|----------------------------------------------------------------------------|--------------------|
|    |             |                | <b>h) Active Clay</b>                                                      |                    |
|    |             |                | <i>(i) Alternative 1 – roadbed construction using lime – Phase 1</i>       |                    |
|    |             |                | <i>(i) Alternative 1 – roadbed construction using lime – Phase 3</i>       |                    |
|    |             |                | <i>(ii) Alternative 2 – Roadbed construction by removal of active clay</i> |                    |
|    |             |                | <b>i) Construction of a pioneer layer</b>                                  |                    |
|    |             |                | <b>A5.1.7.4 Special drainage measures, dewatering</b>                      |                    |
|    |             |                | <b>A5.1.7.5 Dolomitic roadbed treatment</b>                                |                    |
|    |             | <b>A5.1.8</b>  | <b>WORKMANSHIP</b>                                                         |                    |
|    |             |                | <b>A5.1.8.2 Compaction requirements</b>                                    |                    |
|    | <b>C5.1</b> |                | <b>ROADBED<br/>PART C:<br/>MEASUREMENT AND<br/>PAYMENT</b>                 |                    |
|    |             | <b>C5.1.13</b> | <b>Construction of a levelling layer</b>                                   |                    |
|    | <b>D5.1</b> |                | <b>ROADBED<br/>PART D: GUARANTEES<br/>AND COMPLIANCE<br/>CERTIFICATES</b>  |                    |
|    | <b>A5.2</b> |                | <b>FILL</b>                                                                |                    |
|    |             | <b>A5.2.3</b>  | <b>GENERAL</b>                                                             |                    |
|    |             |                | <b>A5.2.3.1 Fill Dimensions and shape</b>                                  |                    |
|    |             |                | <b>A5.2.3.2 Fill adjacent to existing fill</b>                             |                    |
|    |             |                | <b>A5.2.3.3 Fill layer thickness</b>                                       |                    |
|    |             |                | <b>A5.2.3.4 Fill compaction classification</b>                             |                    |
|    |             |                | <b>a) MDD compaction</b>                                                   |                    |
|    |             |                | <i>(i) Sand fill</i>                                                       |                    |
|    |             |                | <i>(ii) Normal fill and Coarse Fill</i>                                    |                    |
|    |             |                | <i>(iii) Fill widening</i>                                                 |                    |
|    |             | <b>A5.2.5</b>  | <b>MATERIALS</b>                                                           |                    |
|    |             |                | <b>A5.2.5.2 Use of fill materials</b>                                      |                    |
|    |             | <b>A5.2.7</b>  | <b>EXECUTION OF THE WORKS</b>                                              |                    |
|    |             |                | <b>A5.2.7.3 Benching for fill construction</b>                             |                    |
|    |             |                | <b>A5.2.7.4 Widening of fills</b>                                          |                    |
|    |             |                | <b>A5.2.7.5 Rockfill embankment toe</b>                                    |                    |

| CH | SEC  | CL     | SUB-CLAUSE                                                                           | SPECIFICATION DATA |
|----|------|--------|--------------------------------------------------------------------------------------|--------------------|
|    |      |        | A5.2.7.9 Fills higher than 10m                                                       |                    |
|    |      |        | A5.2.7.10 Drainage blankets in fills                                                 |                    |
|    |      |        | A5.2.7.11 Drainage blanket layer in cuttings                                         |                    |
|    |      | A5.2.8 | WORKMANSHIP                                                                          |                    |
|    |      |        | A5.2.8.2 Materials Quality and compaction requirements                               |                    |
|    |      |        | Table A5.2.8-1                                                                       |                    |
|    | D5.2 |        | FILL<br>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES                               |                    |
|    | A5.3 |        | ROAD PAVEMENT LAYERS                                                                 |                    |
|    |      | A5.3.3 | GENERAL                                                                              |                    |
|    |      |        | A5.3.3.3 Requirements prior to the construction of any pavement layer                |                    |
|    |      |        | A5.3.3.4 Compaction of pavement layer material                                       |                    |
|    |      |        | A5.3.3.7 Joints between pavement layers                                              |                    |
|    |      |        | a) Location of joints                                                                |                    |
|    |      |        | b) Longitudinal joints                                                               |                    |
|    |      |        | c) Transverse Joints                                                                 |                    |
|    |      |        | A5.3.3.8 Pavement Layer Drainage                                                     |                    |
|    |      | A5.3.5 | MATERIALS                                                                            |                    |
|    |      |        | A5.3.5.1 Material information                                                        |                    |
|    |      |        | A5.3.5.2 Pavement Layer thickness and compaction requirements                        |                    |
|    |      |        | a) Pavement layer thickness requirements                                             |                    |
|    |      |        | b) Gravel and soil pavement layer compaction requirements (G4B to G9 material)       |                    |
|    |      |        | Table A5.3.5-1                                                                       |                    |
|    |      |        | c) Crushed stone pavement layer compaction requirements (G1 to G4A and G5A material) |                    |
|    |      |        | Table A5.3.5-2                                                                       |                    |
|    |      |        | d) Bound macadam (BM) layer                                                          |                    |
|    |      | A5.3.7 | EXECUTION OF WORKS                                                                   |                    |

| CH | SEC  | CL     | SUB-CLAUSE                                                                             | SPECIFICATION DATA |
|----|------|--------|----------------------------------------------------------------------------------------|--------------------|
|    |      |        | A5.3.7.1 Controlling pavement layer thickness                                          |                    |
|    |      |        | b) Minimum pavement layer thickness in transition areas                                |                    |
|    |      |        | A5.3.7.2 Combining Materials                                                           |                    |
|    |      |        | A5.3.7.3 Construction of gravel pavement layers                                        |                    |
|    |      |        | a) Construction                                                                        |                    |
|    |      |        | A5.3.7.7 Initial compaction of crushed stone layer                                     |                    |
|    |      |        | A5.3.7.9 Construction of a Plant Mix Paver Laid (PMPL) layer                           |                    |
|    |      |        | b) Compacting a PMPL layer                                                             |                    |
|    |      |        | (i) Crushed stone                                                                      |                    |
|    |      |        | A5.3.7.10 Construction of a Bound Macadam (BM) layer (1 <sup>st</sup> para 2nd bullet) |                    |
|    |      |        | a) Spreading the aggregate: Construction of a bound macadam layer                      |                    |
|    |      |        | c) Spreading the aggregate                                                             |                    |
|    |      |        | g) Surface finish of the BM layer                                                      |                    |
|    |      |        | A5.3.7.11 Brooming and priming of BM layer                                             |                    |
|    |      |        | A5.3.7.12 Construction of trial sections                                               |                    |
|    |      |        | a) Trial Sections                                                                      |                    |
|    |      |        | f) Trial section for a bound macadam (BM) layer                                        |                    |
|    |      | A5.3.8 | WORKMANSHIP                                                                            |                    |
|    |      |        | A5.3.8.4 Construction tolerances for pavement layers                                   |                    |
|    |      |        | d) Width tolerances                                                                    |                    |
|    |      |        | A5.3.8.5 Surface regularity                                                            |                    |
|    |      |        | c) By using a profiler                                                                 |                    |
|    | B5.3 |        | ROAD PAVEMENT LAYERS<br>PART B: LABOUR ENHANCEMENT                                     |                    |
|    |      | B5.3.5 | MATERIALS                                                                              |                    |
|    |      |        | B5.3.5.1 Material Information                                                          |                    |
|    |      |        | B5.3.5.2 Pavement layer thickness and                                                  |                    |

| CH | SEC  | CL     | SUB-CLAUSE                                                                           | SPECIFICATION DATA |
|----|------|--------|--------------------------------------------------------------------------------------|--------------------|
|    |      |        | compaction requirements                                                              |                    |
|    |      |        | a) Pavement layer thickness requirements                                             |                    |
|    |      |        | b) Gravel and soil pavement layer compaction requirements (G4B to G9 material)       |                    |
|    |      | B5.3.7 | EXECUTION OF WORKS                                                                   |                    |
|    |      |        | B5.3.7.1 Controlling pavement layer thickness                                        |                    |
|    | C5.3 |        | ROAD PAVEMENT LAYERS<br>PART C: MEASUREMENT AND PAYMENT                              |                    |
|    |      | C5.3.1 | Compiling and implementing M&U plans for the construction of all the pavement layers |                    |
|    | D5.3 |        | ROAD PAVEMENT LAYERS<br>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES               |                    |
|    | A5.4 |        | STABILISATION                                                                        |                    |
|    |      | A5.4.3 | GENERAL                                                                              |                    |
|    |      |        | A5.4.3.2 Work in restricted areas                                                    |                    |
|    |      |        | A5.4.3.3 Construction limitations                                                    |                    |
|    |      |        | e) Traffic limitations                                                               |                    |
|    |      | A5.4.5 | MATERIALS                                                                            |                    |
|    |      |        | A5.4.5.1 General                                                                     |                    |
|    |      |        | A5.4.5.2 Material for modification or pre-treatment                                  |                    |
|    |      |        | a) Mechanical pre-treatment of material before stabilization                         |                    |
|    |      |        | b) Cementitious pre-treatment of material before stabilization                       |                    |
|    |      |        | A5.4.5.3 Cementitious stabilising agents                                             |                    |
|    |      |        | A5.4.5.4: Bituminous stabilising agents                                              |                    |
|    |      | A5.4.6 | CONSTRUCTION EQUIPMENT                                                               |                    |
|    |      | A5.4.7 | EXECUTION OF THE WORKS                                                               |                    |
|    |      |        | A5.4.7.1 Construction of a trial section                                             |                    |

| CH | SEC  | CL     | SUB-CLAUSE                                                        | SPECIFICATION DATA |
|----|------|--------|-------------------------------------------------------------------|--------------------|
|    |      |        | A5.4.7.2 Mechanical modification of pavement layer material       |                    |
|    |      |        | A5.4.7.3 Chemical pre-treatment and stabilization                 |                    |
|    |      |        | e) Applying and mixing in the cementitious agent using a recycler |                    |
|    |      |        | A5.4.7.5 PMPL stabilized material                                 |                    |
|    |      |        | A5.4.7.7: Protection and curing of chemically stabilised layers   |                    |
|    |      |        | c) Membrane curing                                                |                    |
|    |      |        | d) Prime coat curing                                              |                    |
|    | D5.4 |        | STABILISATION<br>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES   |                    |
|    | A5.5 |        | RECONSTRUCTION OF PAVEMENT LAYERS                                 |                    |
|    |      | A5.5.2 | DEFINITIONS                                                       |                    |
|    |      |        | Rehabilitation                                                    |                    |
|    |      |        | Uniform pavement sections                                         |                    |
|    |      | A5.5.3 | GENERAL                                                           |                    |
|    |      |        | A5.5.3.1 Traffic accommodation                                    |                    |
|    |      |        | A5.5.3.2 Material selection                                       |                    |
|    |      |        | A5.5.3.3 Existing bituminous seal and/or asphalt layers           |                    |
|    |      | A5.5.4 | DESIGN BY THE CONTRACTOR / PERFORMANCE BASED SYSTEMS              |                    |
|    |      | A5.5.5 | MATERIALS                                                         |                    |
|    |      |        | A5.5.5.1 Existing crushed stone pavement materials                |                    |
|    |      |        | A5.5.5.5 Materials shortfall and make-up material                 |                    |
|    |      | A5.5.7 | EXECUTION OF THE WORKS                                            |                    |
|    |      |        | A5.5.7.1 Patching                                                 |                    |
|    |      |        | a) Patch demarcation                                              |                    |
|    |      |        | c) Backfilling patch excavations                                  |                    |
|    |      |        | A5.5.7.2 Edge break repairs                                       |                    |
|    |      |        | A5.5.7.3 Treatment of exposed pavement layer                      |                    |

| CH | SEC  | CL      | SUB-CLAUSE                                                                          | SPECIFICATION DATA |
|----|------|---------|-------------------------------------------------------------------------------------|--------------------|
|    |      |         | A5.5.7.4 In situ pavement layer reconstruction preparation                          |                    |
|    |      |         | a) Establishing construction levels – minor level changes                           |                    |
|    |      |         | b) Establishing construction levels – significant level changes                     |                    |
|    |      |         | c) Pre-milling the seal or asphalt surfacing                                        |                    |
|    |      |         | d) Preparation of the road surface                                                  |                    |
|    |      |         | e) Pre-pulverising existing pavement layer material                                 |                    |
|    |      |         | A5.5.7.5 In situ pavement layer reconstruction                                      |                    |
|    |      |         | a) Final recycler construction equipment checks                                     |                    |
|    |      |         | c) In situ reconstruction using conventional construction equipment                 |                    |
|    | C5.5 |         | RECONSTRUCTION OF PAVEMENT LAYERS<br>PART C: MEASUREMENT AND PAYMENT                |                    |
|    |      | C5.5.5  | Construction of a trial section using a recycler                                    |                    |
|    |      | C5.5.6  | Construction of a trial section using conventional construction equipment           |                    |
|    |      | C5.5.10 | Roller-pass compaction of an exposed pavement layer                                 |                    |
|    |      | C5.5.13 | Cross mixing of material                                                            |                    |
|    |      | C5.5.20 | Material shortfall or make-up material                                              |                    |
|    | D5.5 |         | RECONSTRUCTION OF PAVEMENT LAYERS<br>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES |                    |

**COTO CHAPTER 6: CONCRETE LAYERS**

| CH | SEC         | CL            | SUB-CLAUSE                                                                                            | SPECIFICATION DATA                                                                                                        |
|----|-------------|---------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 6  |             |               | <b>CONCRETE LAYERS</b>                                                                                |                                                                                                                           |
|    | <b>A6.1</b> |               | <b>PAVER LAID<br/>CONCRETE LAYERS</b>                                                                 |                                                                                                                           |
|    |             | <b>A6.1.2</b> | <b>DEFINITIONS</b>                                                                                    |                                                                                                                           |
|    |             |               | Aggregate                                                                                             |                                                                                                                           |
|    |             | <b>A6.1.4</b> | <b>DESIGN BY<br/>CONTRACTOR /<br/>PERFORMANCE<br/>BASED SYSTEMS</b>                                   |                                                                                                                           |
|    |             |               | <b>A6.1.4.2 Design<br/>requirements</b>                                                               |                                                                                                                           |
|    |             |               | <b>e) Air content</b>                                                                                 |                                                                                                                           |
|    |             | <b>A6.1.5</b> | <b>MATERIALS</b>                                                                                      |                                                                                                                           |
|    |             |               | <b>A6.1.5.5 Reinforcing<br/>steel, tie-bars and<br/>dowels</b>                                        |                                                                                                                           |
|    |             |               | <b>a) Dimensions</b>                                                                                  | The dimension detail is also indicated on the Drawings                                                                    |
|    |             |               | <b>A6.1.5.7 Materials for<br/>joints</b>                                                              |                                                                                                                           |
|    |             |               | <b>b) Silicone sealant</b>                                                                            |                                                                                                                           |
|    |             |               | <i>(vii) Sealant.</i>                                                                                 | The joint filled with sealant detail is indicated on the drawings                                                         |
|    |             |               | <i>(iv) Materials for<br/>cleaning, repairing and<br/>resealing of existing<br/>joints and cracks</i> | The requirements for resealing of existing joints or cracks shall comply with the requirements of Chapter 7 (section 7.1) |
|    |             | <b>A6.1.6</b> | <b>CONSTRUCTION<br/>EQUIPMENT</b>                                                                     |                                                                                                                           |
|    |             |               | <b>A6.1.6.6 Texture<br/>grooving equipment</b>                                                        |                                                                                                                           |
|    |             | <b>A6.1.7</b> | <b>EXECUTION OF THE<br/>WORKS</b>                                                                     |                                                                                                                           |
|    |             |               | <b>A6.1.7.1 Preparing the<br/>Underlying Layers</b>                                                   |                                                                                                                           |
|    |             |               | <b>a) General</b>                                                                                     |                                                                                                                           |
|    |             |               | <b>b) Applying the prime<br/>or bond coat</b>                                                         |                                                                                                                           |
|    |             |               | <b>A6.1.7.3 Placing,<br/>Compacting and<br/>Finishing Concrete</b>                                    |                                                                                                                           |
|    |             |               | <b>a) General<br/>requirements for both<br/>side-form and slip-<br/>form paving</b>                   |                                                                                                                           |
|    |             |               | <i>(v) Placing of tie bars</i>                                                                        | The placing of tie bar detail is indicated on the Drawings                                                                |
|    |             |               | <i>(vi) Placing of dowel bars</i>                                                                     | The placing of dowel bar detail is indicated on the Drawings                                                              |
|    |             |               | <i>(viii) Placing of steel<br/>mesh in jointed concrete<br/>pavement</i>                              | The placement of steel mesh detail is indicated on the drawings                                                           |

| CH | SEC         | CL            | SUB-CLAUSE                                                                              | SPECIFICATION DATA                                                                                                                                                                                                                                    |
|----|-------------|---------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |             |               | <b>A6.1.7.3 Placing, Compacting and Finishing Concrete</b>                              |                                                                                                                                                                                                                                                       |
|    |             |               | <b>a) General requirements for both side-form and slip-form paving</b>                  |                                                                                                                                                                                                                                                       |
|    |             |               | <i>(x) Surface texturing</i>                                                            | The pavement surface shall be further textured by means of a grooving comb.                                                                                                                                                                           |
|    |             |               | <b>A6.1.7.4 Joint forming</b>                                                           |                                                                                                                                                                                                                                                       |
|    |             |               | <b>a) Construction joints</b>                                                           | The joint detail is indicated on the Drawings                                                                                                                                                                                                         |
|    |             |               | <b>b) Weakened-plain longitudinal hinge joints</b>                                      | The construction joint detail is indicated on the Drawings                                                                                                                                                                                            |
|    |             |               | <b>c) Weakened-plain transverse contraction joints</b>                                  | The depth of sawn groove detail is indicated on the Drawings<br><br>The joints shall be sealed in accordance with clause A6.1.7.5 and as indicated on the Drawings                                                                                    |
|    |             |               | <b>d) Expansion joints</b>                                                              | The expansion joint detail is indicated on the Drawings                                                                                                                                                                                               |
|    |             |               | <b>A6.1.7.5 Joint sealing</b>                                                           |                                                                                                                                                                                                                                                       |
|    |             |               | <b>a) Silicone sealant</b>                                                              |                                                                                                                                                                                                                                                       |
|    |             |               | <i>(vii) Materials</i>                                                                  | The dimensions and positions of the sealant and appurtenant materials is indicated on the Drawings                                                                                                                                                    |
|    |             | <b>A6.1.8</b> | <b>WORKMANSHIP</b>                                                                      |                                                                                                                                                                                                                                                       |
|    |             |               | <b>c) Construction tolerances</b>                                                       |                                                                                                                                                                                                                                                       |
|    |             |               | <i>(vii) Surface regularity</i>                                                         | The surface regularity shall be measured with either an Inertial High speed profilometer (IRI) or a Direct Contact Device (IRI).<br>The rolling Straight Edge or 3,0m straight edge will only be used in areas inaccessible to the above instruments. |
|    | <b>B6.1</b> |               | <b>PAVER LAID CONCRETE LAYERS<br/>PART B: LABOUR<br/>ENHANCEMENT</b>                    |                                                                                                                                                                                                                                                       |
|    |             | <b>B6.1.6</b> | <b>CONSTRUCTION EQUIPMENT</b>                                                           |                                                                                                                                                                                                                                                       |
|    |             |               | <b>B6.1.6.6 Texture grooving equipment</b>                                              |                                                                                                                                                                                                                                                       |
|    |             | <b>B6.1.8</b> | <b>WORKMANSHIP</b>                                                                      |                                                                                                                                                                                                                                                       |
|    | <b>C6.1</b> |               | <b>PAVER LAID CONCRETE LAYERS<br/>PART C:<br/>MEASUREMENT AND PAYMENT</b>               |                                                                                                                                                                                                                                                       |
|    |             | <b>C6.1.2</b> | <b>Construction of jointed concrete pavement (JCP) (Excluding texturing and curing)</b> |                                                                                                                                                                                                                                                       |

| CH | SEC         | CL            | SUB-CLAUSE                                                                                        | SPECIFICATION DATA                                                                                           |
|----|-------------|---------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
|    |             |               | C6.1.2.3                                                                                          |                                                                                                              |
|    |             | <b>C6.1.4</b> | <b>Construction of continuously reinforced concrete pavement (Excluding texturing and curing)</b> |                                                                                                              |
|    |             |               | C6.1.3.2                                                                                          |                                                                                                              |
|    | <b>A6.2</b> |               | <b>SEGMENTAL BLOCK PAVING LAYERS</b>                                                              |                                                                                                              |
|    |             | <b>A6.2.4</b> | <b>DESIGN BY CONTRACTOR PERFORMANCE BASED SYSTEMS</b>                                             |                                                                                                              |
|    |             | <b>A6.2.5</b> | <b>MATERIALS</b>                                                                                  |                                                                                                              |
|    |             |               | <b>A6.2.5.1 Paving blocks</b>                                                                     | The paving blocks shall be of class 35Mpa and thickness 80mm                                                 |
|    |             |               | <b>A6.2.5.4 Concrete beams, kerbs and channelling</b>                                             | Prefabricated kerbing and channelling shall comply with the requirements of Section A3.3 / B3.3 of Chapter 3 |
|    |             | <b>A6.2.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                     |                                                                                                              |
|    |             |               | <b>A6.2.7.1 Preparing the underlying layers.</b>                                                  |                                                                                                              |
|    |             |               | <b>A6.2.7.4 Laying of the blocks.</b>                                                             | The laying pattern and dimensions is indicated on the Drawings                                               |
|    | <b>D6.2</b> |               | <b>SEGMENTAL BLOCK PAVING LAYERS PART D: GUARANTEES AND COMPLIANCE CERTIFICATES</b>               |                                                                                                              |

**COTO CHAPTER 7: MAINTENANCE AND REPAIR OF CONCRETE LAYERS**

| CH | SEC  | CL     | SUB-CLAUSE                                                                                          | SPECIFICATION DATA                                                                  |
|----|------|--------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 7  |      |        | <b>MAINTENANCE AND REPAIR OF CONCRETE LAYERS</b>                                                    |                                                                                     |
|    | A7.1 |        | <b>REPLACEMENT OF EXISTING JOINT SEALANT</b>                                                        |                                                                                     |
|    |      | A7.1.3 | <b>GENERAL</b>                                                                                      | The joint filled with sealant detail is indicated on the Drawings                   |
|    |      | A7.1.8 | <b>WORKMANSHIP</b>                                                                                  |                                                                                     |
|    |      |        | A7.1.8.1 Groove width                                                                               | The dimensions and positions of the grooves is indicated on the Drawings            |
|    | D7.1 |        | <b>REPLACEMENT OF EXISTING JOINT SEALANT<br/>PART D:<br/>GUARANTEES AND COMPLIANCE CERTIFICATES</b> |                                                                                     |
|    |      | D7.1.4 | <b>DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS</b>                                             |                                                                                     |
|    |      | D7.1.5 | <b>MATERIALS</b>                                                                                    | The dimensions and positions of the joints for sealant is indicated on the Drawings |
|    |      | D7.1.7 | <b>EXECUTION OF THE WORKS</b>                                                                       |                                                                                     |
|    |      |        | D7.1.7.1 Pavement description and extent of joint repairs covered by the PPGS                       |                                                                                     |
|    |      |        | b) Description of the existing pavement, condition and related issues                               |                                                                                     |
|    |      | D7.1.8 | <b>WORKMANSHIP</b>                                                                                  |                                                                                     |
|    |      |        | D7.1.8.5 PROCEDURES TO BE ADOPTED IN THE EVENT OF FAILURE DURING THE GUARANTEE PERIOD               |                                                                                     |
|    | A7.2 |        | <b>REPAIR TO EXISTING JOINTS AND UNCONTROLLED CRACKS IN CONCRETE PAVEMENTS</b>                      |                                                                                     |
|    |      | A7.2.2 | <b>DEFINITIONS<br/>Joint types</b>                                                                  | The construction joint detail is indicated on the Drawings                          |
|    |      | A7.2.5 | <b>MATERIALS</b>                                                                                    |                                                                                     |
|    |      |        | A7.2.5.4 Epoxy and repair products                                                                  | The specification for the treatment is indicated on the Drawings                    |

| CH | SEC         | CL            | SUB-CLAUSE                                                                                                                        | SPECIFICATION DATA                                                                                                                 |
|----|-------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|    |             |               | <b>A7.2.5.5 Bond breaking products</b>                                                                                            | The concrete faces that require the bond breaking product is indicated on the Drawings                                             |
|    |             |               | <b>A7.2.5.6 TIE BARS, DOWELS, CONTINUOUS REINFORCING STEEL AND STEEL MESH</b>                                                     | The placing of steel products (tie bars, dowels, reinforcing and mesh) is indicated on the Drawings                                |
|    |             | <b>A7.2.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                                                     |                                                                                                                                    |
|    |             |               | <b>A7.2.7.1 Repairing joints and cracks</b>                                                                                       |                                                                                                                                    |
|    |             |               | <b>A7.2.7.2 Repairing joints and cracks by full-depth removal of concrete adjacent to the crack or joint</b>                      |                                                                                                                                    |
|    |             |               | <b>A7.2.7.3 Full depth repairs</b>                                                                                                | The position and dimensions of the repair sections and type of joint preparation, is included on the Drawings                      |
|    |             |               | <b>b) Preparation of repair area</b>                                                                                              | The position and dimensions of the repair sections, use of tie bars and type of joint preparation, is included on the drawings     |
|    |             |               | <b>e) Placing of Concrete</b>                                                                                                     | The details of the mesh reinforcing, is included on the drawings<br><br>The details of the saw cutting is included on the Drawings |
|    | <b>C7.2</b> |               | <b>REPAIR TO EXISTING JOINTS AND UNCONTROLLED CRACKS IN CONCRETE PAVEMENTS<br/>PART C: MEASUREMENT AND PAYMENT</b>                |                                                                                                                                    |
|    |             | <b>C7.2.8</b> | <b>Steel reinforcement in concrete pavements</b>                                                                                  | The details of the mesh reinforcing is included on the Drawings                                                                    |
|    | <b>D7.2</b> |               | <b>REPAIR TO EXISTING JOINTS AND UNCONTROLLED CRACKS IN CONCRETE PAVEMENTS<br/>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES</b> |                                                                                                                                    |
|    | <b>A7.3</b> |               | <b>REMOVAL AND REINSTATEMENT OF EXISTING CONCRETE LAYERS</b>                                                                      |                                                                                                                                    |
|    |             | <b>A7.3.2</b> | <b>DEFINITIONS<br/>Aggregate</b>                                                                                                  |                                                                                                                                    |
|    |             | <b>A7.3.5</b> | <b>MATERIALS</b>                                                                                                                  |                                                                                                                                    |

| CH | SEC | CL            | SUB-CLAUSE                                                                                        | SPECIFICATION DATA                                                                                                                                                                       |
|----|-----|---------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |     |               | <b>A7.3.5.4 TIE BARS, DOWEL BARS AND REINFORCING MESH</b>                                         | The placing of tie bar, dowel bars and reinforcing mesh detail is indicated on the Drawings                                                                                              |
|    |     | <b>A7.3.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                     |                                                                                                                                                                                          |
|    |     |               | <b>A7.3.7.1 Removal of existing concrete</b>                                                      |                                                                                                                                                                                          |
|    |     |               | <b>A7.3.7.2 Preparing the underlying layer/s after concrete has been removed</b>                  |                                                                                                                                                                                          |
|    |     |               | <b>a) Underlying layers remaining in place</b>                                                    |                                                                                                                                                                                          |
|    |     |               | <i>(iii) Recompression of existing underlying pavement layers</i>                                 |                                                                                                                                                                                          |
|    |     |               | <b>b) Removal of existing underlying pavement layers</b>                                          |                                                                                                                                                                                          |
|    |     |               | <b>A7.3.7.3 Reinstating underlying layers during rehabilitation work</b>                          |                                                                                                                                                                                          |
|    |     |               | <b>a) Gravel layers</b>                                                                           |                                                                                                                                                                                          |
|    |     |               | <b>b) Stabilised layers</b>                                                                       |                                                                                                                                                                                          |
|    |     |               | <b>A7.3.7.4 Reinstatement of tie bars, dowel bars continuous reinforcing and reinforcing mesh</b> |                                                                                                                                                                                          |
|    |     |               | <b>a) Tie bars</b>                                                                                |                                                                                                                                                                                          |
|    |     |               | <i>(i) In new concrete</i>                                                                        | The placing of tie bars and spacing thereof is indicated on the Drawings                                                                                                                 |
|    |     |               | <b>b) Dowel bars</b>                                                                              |                                                                                                                                                                                          |
|    |     |               | <i>(i) In new concrete</i>                                                                        | The placing of dowels bars and details thereof is indicated on the Drawings                                                                                                              |
|    |     |               | <i>(ii) Between existing and new concrete</i>                                                     | The reinstatement of dowels bars and details thereof is indicated on the Drawings                                                                                                        |
|    |     |               | <b>c) Continuous reinforcing steel</b>                                                            |                                                                                                                                                                                          |
|    |     |               | <i>(i) In new concrete</i>                                                                        | The placing of continuous reinforcing steel and details thereof is indicated on the Drawings                                                                                             |
|    |     |               | <i>(ii) In existing concrete</i>                                                                  | The placing of continuous reinforcing steel and details thereof is indicated on the Drawings<br>Placing of continuous reinforcing steel and details thereof is indicated on the Drawings |
|    |     |               | <b>d) Reinforcing steel mesh</b>                                                                  |                                                                                                                                                                                          |
|    |     |               | <i>(i) In new concrete</i>                                                                        |                                                                                                                                                                                          |
|    |     |               | <i>(ii) In existing concrete</i>                                                                  | Details of splicing are indicated on the drawings                                                                                                                                        |

| CH | SEC  | CL      | SUB-CLAUSE                                                                                                 | SPECIFICATION DATA                                                                          |
|----|------|---------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
|    |      |         | A7.3.7.5 Replacing the concrete                                                                            |                                                                                             |
|    | C7.3 |         | REMOVAL AND REINSTATEMENT OF EXISTING CONCRETE LAYERS<br>PART C:<br>MEASUREMENT AND PAYMENT                |                                                                                             |
|    |      | C7.3.2  | Full depth repairs using hand placed concrete with CEM I 52,5                                              | The details of the full depth repairs by hand and joint faces are indicated on the drawings |
|    |      | C7.3.3  | Partial Depth Repairs using hand placed fine concrete                                                      |                                                                                             |
|    |      | C7.3.4  | Tie-bars and dowels for full depth repairs                                                                 | The measure of tie bars or dowels are indicated on the Drawings                             |
|    |      | C7.3.5  | Partial Depth Repairs using hand placed acrylic resin grout                                                |                                                                                             |
|    |      | C7.3.6  | Reinstating the subbase with lean mix concrete                                                             |                                                                                             |
|    |      | C7.3.16 | Steel reinforcement in concrete pavements                                                                  | The measure of steel reinforcement and mesh are indicated on the Drawings                   |
|    | D7.3 |         | REMOVAL AND REINSTATEMENT OF EXISTING CONCRETE LAYERS<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES |                                                                                             |
|    | D7.4 |         | REINSTATEMENT OF SLAB SUPPORT BY GROUT INJECTION<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES      |                                                                                             |
|    | A7.5 |         | REINSTATEMENT OF RIDING QUALITY                                                                            |                                                                                             |
|    |      | A7.5.7  | EXECUTION OF THE WORKS                                                                                     |                                                                                             |
|    |      |         | A7.5.7.2 Areas to be treated as a result of smoothness deficiencies in the existing concrete.              |                                                                                             |
|    |      | A7.5.8  | WORKMANSHIP                                                                                                |                                                                                             |
|    | D7.5 |         | REINSTATEMENT OF RIDING QUALITY<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES                       |                                                                                             |
|    | A7.6 |         | REINSTATEMENT OF SURFACE TEXTURE                                                                           |                                                                                             |

| CH | SEC  | CL     | SUB-CLAUSE                                                                                 | SPECIFICATION DATA |
|----|------|--------|--------------------------------------------------------------------------------------------|--------------------|
|    |      | A7.6.7 | EXECUTION OF THE WORKS                                                                     |                    |
|    |      |        | A7.6.7.2 Areas to be treated as a result of texture deficiencies in the existing concrete. |                    |
|    | D7.6 |        | REINSTATEMENT OF SURFACE TEXTURE<br>PART D:<br>GUARANTEES AND COMPLIANCE<br>CERTIFICATES   |                    |

**COTO CHAPTER 8:      PRETREATMENT AND REPAIR OF EXISTING LAYERS**

| CH | SEC         | CL            | SUB-CLAUSE                                                              | SPECIFICATION DATA                                                                                    |
|----|-------------|---------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 8  |             |               | <b>PRETREATMENT AND REPAIR OF EXISTING LAYERS</b>                       |                                                                                                       |
|    | <b>A8.1</b> |               | <b>PRIME COAT</b>                                                       |                                                                                                       |
|    |             | <b>A8.1.3</b> | <b>GENERAL</b>                                                          |                                                                                                       |
|    |             |               | <b>A8.1.3.1 Weather limitations</b>                                     |                                                                                                       |
|    |             | <b>A8.1.5</b> | <b>MATERIALS</b>                                                        |                                                                                                       |
|    |             |               | <b>A8.1.5.1 Bituminous material</b>                                     | The priming material shall be one of the following as specified in Part C: Measurement and Payment    |
|    |             | <b>A8.1.7</b> | <b>EXECUTION OF THE WORKS</b>                                           |                                                                                                       |
|    |             |               | <b>A8.1.7.5 Opening to traffic</b>                                      | Where a blinding layer is specified in the drawings                                                   |
|    | <b>B8.1</b> |               | <b>PRIME COAT<br/>PART B: LABOUR<br/>ENHANCEMENT</b>                    |                                                                                                       |
|    |             | <b>B8.1.8</b> | <b>WORKMANSHIP</b>                                                      |                                                                                                       |
|    | <b>A8.2</b> |               | <b>COVER SPRAYS,<br/>FOG SPRAYS<br/>AND<br/>REJUVENATION<br/>SPRAYS</b> |                                                                                                       |
|    |             | <b>A8.2.3</b> | <b>GENERAL</b>                                                          |                                                                                                       |
|    |             | <b>A8.2.7</b> | <b>EXECUTION OF THE WORKS</b>                                           |                                                                                                       |
|    |             |               | <b>A8.2.7.1 Preparation and execution</b>                               |                                                                                                       |
|    | <b>A8.4</b> |               | <b>RUT AND/OR<br/>DEPRESSION<br/>CORRECTION</b>                         |                                                                                                       |
|    |             | <b>A8.4.3</b> | <b>GENERAL</b>                                                          |                                                                                                       |
|    |             | <b>A8.4.5</b> | <b>MATERIALS</b>                                                        | <b>Table A8.4.5-1: Specifications for rut and depression correction materials</b>                     |
|    |             | <b>A8.4.7</b> | <b>EXECUTION OF THE WORKS</b>                                           |                                                                                                       |
|    |             |               | <b>A8.4.7.1 Continuous graded asphalt</b>                               | Where the required asphalt thickness exceeds 25mm at any position, no hand placement shall be allowed |
|    |             |               | <b>A8.4.7.3 Coarse slurry</b>                                           |                                                                                                       |
|    | <b>A8.5</b> |               | <b>STANDARD<br/>CRACK SEALING</b>                                       | <b>SPECIFICATIONS</b>                                                                                 |
|    |             | <b>A8.5.7</b> | <b>EXECUTION OF THE WORKS</b>                                           |                                                                                                       |
|    |             |               | <b>A8.5.7.1 Preparation and execution</b>                               |                                                                                                       |

| CH | SEC  | CL     | SUB-CLAUSE                                                                    | SPECIFICATION DATA |
|----|------|--------|-------------------------------------------------------------------------------|--------------------|
|    | A8.8 |        | PATCHING AND<br>EDGE BREAK<br>REPAIR                                          |                    |
|    |      | A8.8.5 | MATERIALS                                                                     |                    |
|    |      |        | A8.8.5.3 Backfill<br>material                                                 |                    |
|    |      |        | Table A8.8.5-2:<br>Backfill material                                          |                    |
|    | C8.8 |        | PATCHING AND<br>EDGE BREAK<br>REPAIR<br>PART C:<br>MEASUREMENT<br>AND PAYMENT |                    |
|    |      | C8.8.2 | Excavation in<br>existing<br>pavements for<br>patching (non-<br>milling)      |                    |
|    |      |        | C8.8.2.3 Other<br>layers (specify type)                                       |                    |

**COTO CHAPTER 9: ASPHALT LAYERS**

| CH | SEC         | CL            | SUB-CLAUSE                                                                                                                                          | SPECIFICATION DATA |
|----|-------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 9  |             |               | <b>ASPHALT LAYERS</b>                                                                                                                               |                    |
|    | <b>A9.1</b> |               | <b>ASPHALT LAYERS</b>                                                                                                                               |                    |
|    |             | <b>A9.1.2</b> | <b>DEFINITIONS</b>                                                                                                                                  |                    |
|    |             |               | Asphalt mix types                                                                                                                                   |                    |
|    |             |               | Asphalt mixes                                                                                                                                       |                    |
|    |             |               | Cold mix asphalt (CA)                                                                                                                               |                    |
|    |             |               | Aggregate                                                                                                                                           |                    |
|    |             | <b>A9.1.3</b> | <b>GENERAL</b>                                                                                                                                      |                    |
|    |             |               | A9.1.3.1 Nominal mix proportions and application rates                                                                                              |                    |
|    |             |               | Table A9.1.3-1: Nominal Mix Proportions of Stone Skeletal Mixes for Tender Purposes Bitumen (type and grade according to Project Documentation) (%) |                    |
|    |             |               | Table A9.1.3-1: Nominal Mix Proportions of Stone Skeletal Mixes for Tender Purposes                                                                 |                    |
|    |             |               | Table A9.1.3-1 *Note 2:                                                                                                                             |                    |
|    |             |               | Table A9.1.3-2: Nominal Mix Proportions of Sand Skeletal Mixes for Tender Purposes Bitumen (type and grade according to Contract Documentation) (%) |                    |
|    |             |               | Table A9.1.3-2: Nominal Mix Proportions of Sand Skeletal Mixes for Tender Purposes                                                                  |                    |
|    |             |               | Table A9.1.3-2 *Note 2:                                                                                                                             |                    |
|    |             |               | b) Bond coat and rolled-in chippings                                                                                                                |                    |
|    |             | <b>A9.1.4</b> | <b>DESIGN BY THE CONTRACTOR</b>                                                                                                                     |                    |
|    |             |               | A9.1.4.1 Mix Designs                                                                                                                                |                    |
|    |             |               | A9.1.4.2 Mix design requirements                                                                                                                    |                    |
|    |             | <b>A9.1.5</b> | <b>MATERIALS</b>                                                                                                                                    |                    |
|    |             |               | A9.1.5.2 Bituminous binders for asphalt mixes                                                                                                       |                    |
|    |             |               | A9.1.5.3 Bitumen bond coat                                                                                                                          |                    |

| CH | SEC         | CL            | SUB-CLAUSE                                         | SPECIFICATION DATA                                                                                                                        |
|----|-------------|---------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|    |             |               | <b>A9.1.5.4Aggregates</b>                          |                                                                                                                                           |
|    |             |               | a) Aggregate Properties                            |                                                                                                                                           |
|    |             |               | c) Fine aggregate grading                          |                                                                                                                                           |
|    |             |               | <b>A9.1.5.5 Fillers</b>                            |                                                                                                                                           |
|    |             |               | Table A9.1.5-7: Filler requirements                |                                                                                                                                           |
|    |             |               | <b>A9.1.5.8Mix properties</b>                      |                                                                                                                                           |
|    |             |               | <b>A9.1.5.9Asphalt Reinforcing</b>                 |                                                                                                                                           |
|    |             | <b>A9.1.6</b> | <b>CONSTRUCTION EQUIPMENT</b>                      |                                                                                                                                           |
|    |             |               | <b>A9.1.6.3Paver</b>                               |                                                                                                                                           |
|    |             |               | <b>A9.1.6.5Rollers</b>                             | Only oscillating type vibratory compaction equipment may be used on bridge decks.                                                         |
|    |             | <b>A9.1.7</b> | <b>EXECUTION OF THE WORKS</b>                      |                                                                                                                                           |
|    |             |               | <b>A9.1.7.5Bond coat</b>                           |                                                                                                                                           |
|    |             |               | <b>A9.1.7.6Placing the asphalt</b>                 |                                                                                                                                           |
|    |             |               | <b>A9.1.7.9Applying rolled-in chippings</b>        |                                                                                                                                           |
|    |             |               | <b>A9.1.7.11Surfacing of bridge decks</b>          |                                                                                                                                           |
|    |             | <b>A9.1.8</b> | <b>WORKMANSHIP</b>                                 |                                                                                                                                           |
|    |             |               | <b>A9.1.8.8 Sampling</b>                           |                                                                                                                                           |
|    |             |               | <b>b) Coring of completed layers</b>               | The Contractor shall provide suitable coring machines capable of cutting 100mm or 150mm diameter cores from the completed asphalt layers. |
|    | <b>D9.1</b> |               | <b>ASPHALT LAYERS</b>                              |                                                                                                                                           |
|    |             | <b>D9.1.1</b> | <b>SCOPE</b>                                       | "The duration of any such performance guarantees shall be as specified in the contract documentation"                                     |
|    |             | <b>D9.1.2</b> | <b>DEFINITIONS</b>                                 |                                                                                                                                           |
|    |             |               | Performance Period:                                |                                                                                                                                           |
|    |             |               | Performance Guarantee Period:                      |                                                                                                                                           |
|    |             |               | Performance Guarantees:                            |                                                                                                                                           |
|    |             | <b>D9.1.3</b> | <b>GENERAL</b>                                     |                                                                                                                                           |
|    |             |               | <b>D9.1.3.1Extended Performance Warranty</b>       |                                                                                                                                           |
|    |             |               | Table D9.1.3-1: Programme of release of guarantees |                                                                                                                                           |
|    |             | <b>D9.1.8</b> | <b>QUALITY OF MATERIALS AND WORKMANSHIP</b>        |                                                                                                                                           |
|    |             |               | <b>D9.1.8.2 Permissible deviations</b>             |                                                                                                                                           |
|    |             |               | <b>e) Layer Thickness</b>                          |                                                                                                                                           |

| CH | SEC | CL      | SUB-CLAUSE                   | SPECIFICATION DATA                                                                                                                                                                                                    |
|----|-----|---------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |     | D9.1.9  | ASSESSMENT CRITEREA          |                                                                                                                                                                                                                       |
|    |     | D9.1.10 | ACCEPTANCE CRITERIA          |                                                                                                                                                                                                                       |
|    |     |         | D9.1.10.1 Visual Assessments |                                                                                                                                                                                                                       |
|    |     |         | D9.1.10.2 Deflection         | At the end of the Performance Guarantee Period, the structural capacity of the road pavement, as determined in terms of deflection measurements, shall conform to be acceptance criteria presented in Table D9.1.10-2 |

**COTO CHAPTER 10: SURFACE TREATMENTS**

| CH | SEC   | CL      | SUB-CLAUSE                                  | SPECIFICATION DATA |
|----|-------|---------|---------------------------------------------|--------------------|
| 10 |       |         | SURFACE TREATMENTS                          |                    |
|    | A10.1 |         | GENERAL REQUIREMENTS FOR SURFACE TREATMENTS |                    |
|    |       | A10.1.3 | GENERAL                                     |                    |
|    |       |         | A10.1.3.2 Weather limitations               |                    |
|    |       |         | Table A10.1.3-1                             |                    |

**COTO CHAPTER 11: ANCILLARY ROAD WORKS**

| CH | SEC   | CL      | SUB-CLAUSE                                                                                                                  | SPECIFICATION DATA |
|----|-------|---------|-----------------------------------------------------------------------------------------------------------------------------|--------------------|
| 11 |       |         | ANCILLARY ROAD WORKS                                                                                                        |                    |
|    | A11.1 |         | PITCHING, STONework, CAST IN SITU CONCRETE FOR PROTECTION AGAINST EROSION                                                   |                    |
|    |       | A11.1.5 | MATERIALS                                                                                                                   |                    |
|    |       |         | A11.1.5.6 Geotextiles                                                                                                       |                    |
|    |       |         | A11.1.5.7 Alternative materials                                                                                             |                    |
|    | D11.1 |         | PITCHING, STONework, CAST IN SITU CONCRETE FOR PROTECTION AGAINST EROSION<br>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES |                    |
|    | A11.2 |         | NON-STRUCTURAL GABIONS                                                                                                      |                    |
|    |       | A11.2.7 | EXECUTION OF WORKS                                                                                                          |                    |
|    |       |         | A11.2.7.2 Constructing gabion boxes and mattresses                                                                          |                    |
|    |       |         | g) Assembly                                                                                                                 |                    |
|    | D11.2 |         | NON-STRUCTURAL GABIONS<br>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES                                                    |                    |
|    | A11.3 |         | GUIDE BLOCKS AND KILOMETRE MARKERS                                                                                          |                    |
|    |       | A11.3.1 | SCOPE                                                                                                                       |                    |
|    |       | A11.3.5 | MATERIALS                                                                                                                   |                    |
|    |       |         | A11.3.5.5 Alternative materials                                                                                             |                    |
|    | D11.3 |         | GUIDE BLOCKS AND KILOMETRE MARKERS<br>PART D: GUARANTEES AND COMPLIANCE CERTIFICATES                                        |                    |
|    | A11.4 |         | ROAD RESTRAINT SYSTEMS                                                                                                      |                    |
|    |       | A11.4.1 | SCOPE                                                                                                                       |                    |
|    |       | A11.4.4 | DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS                                                                            |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                                   | SPECIFICATION DATA |
|----|-------|---------|--------------------------------------------------------------|--------------------|
|    |       | A11.4.5 | MATERIALS                                                    |                    |
|    |       |         | A11.4.5.2 Materials                                          |                    |
|    |       |         | a) Steel guardrails for erection on timber posts             |                    |
|    |       |         | c) Guardrail posts                                           |                    |
|    |       | A11.4.7 | EXECUTION OF THE WORKS                                       |                    |
|    |       |         | A11.4.7.2 Construction of guardrails on timber posts         |                    |
|    |       |         | A11.4.7.4 Construction of concrete barrier systems           |                    |
|    | A11.5 |         | FENCING                                                      |                    |
|    |       | A11.5.4 | DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS             |                    |
|    |       | A11.5.5 | MATERIALS                                                    |                    |
|    |       |         | A11.5.5.2 Straining posts, stays, standards and droppers     |                    |
|    |       |         | A11.5.5.10 Hinge joint mesh                                  |                    |
|    |       |         | A11.5.5.12 Alternative materials                             |                    |
|    |       | A11.5.7 | EXECUTION OF THE WORKS                                       |                    |
|    |       |         | A11.5.7.7 Erecting special purpose fencing                   |                    |
|    |       |         | A11.5.7.11 Temporary fencing and gates                       |                    |
|    | D11.5 |         | FENCING<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES |                    |
|    | A11.6 |         | ROAD SIGNS                                                   |                    |
|    |       | A11.6.1 | SCOPE                                                        |                    |
|    |       | A11.6.5 | MATERIALS                                                    |                    |
|    |       |         | A11.6.5.2 Materials                                          |                    |
|    |       |         | a) Structural steel                                          |                    |
|    |       |         | d) Other plate material                                      |                    |
|    |       |         | m) Alternative materials                                     |                    |
|    |       | A11.6.7 | EXECUTION OF THE WORKS                                       |                    |
|    |       |         | A11.6.7.1 Classification of Materials                        |                    |
|    |       |         | A11.6.7.2 Manufacturing of road                              |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                                             | SPECIFICATION DATA |
|----|-------|---------|------------------------------------------------------------------------|--------------------|
|    |       |         | signboards and supports                                                |                    |
|    |       |         | d) Galvanizing                                                         |                    |
|    |       |         | A11.6.7.3 Road sign faces and painting                                 |                    |
|    |       |         | b) Preparing surfaces and applying paint and retro-reflective sheeting |                    |
|    |       |         | A11.6.7.5 Erecting road signs                                          |                    |
|    |       |         | a) Position                                                            |                    |
|    |       |         | b) Excavation and backfilling                                          |                    |
|    |       |         | A11.6.7.7 Dismantling, storing and re-erecting existing road signs     |                    |
|    | C11.6 |         | ROAD SIGNS<br>PART C:<br>MEASUREMENT AND PAYMENT                       |                    |
|    |       |         | ii) Notes on measurement and pay items                                 |                    |
|    |       |         | iii) Items that will not be measured separately                        |                    |
|    | A11.7 |         | ROAD MARKINGS AND ROAD STUDS                                           |                    |
|    |       | A11.7.5 | MATERIALS                                                              |                    |
|    |       |         | A11.7.5.2 Materials                                                    |                    |
|    |       |         | a) Marking materials                                                   |                    |
|    |       |         | (ii) Retro-reflective road marking                                     |                    |
|    |       |         | (iii) Thermoplastic road marking material                              |                    |
|    |       |         | b) Road studs                                                          |                    |
|    | A11.8 |         | LANDSCAPING AND PLANTING PLANTS                                        |                    |
|    |       | A11.8.5 | MATERIALS                                                              |                    |
|    |       |         | A11.8.5.2 Materials                                                    |                    |
|    |       |         | b) Fertiliser/soil-improvement material                                |                    |
|    |       |         | d) Grass seeds                                                         |                    |
|    |       |         | e) Trees and shrubs                                                    |                    |
|    |       |         | Grass sods                                                             |                    |
|    |       |         | Nursery grown sods                                                     |                    |
|    |       |         | g) Manure                                                              |                    |
|    |       | A11.8.7 | EXECUTION OF THE WORKS                                                 |                    |
|    |       |         | A11.8.7.3 Grassing                                                     |                    |
|    |       |         | c) Hydroseeding                                                        |                    |
|    |       |         | f) Sowing by hand                                                      |                    |

| CH | SEC   | CL | SUB-CLAUSE                                                                                                      | SPECIFICATION DATA |
|----|-------|----|-----------------------------------------------------------------------------------------------------------------|--------------------|
|    |       |    | g) Other methods of grassing                                                                                    |                    |
|    |       |    | A11.8.7.6 Alternative slope and erosion protection                                                              |                    |
|    |       |    | A11.8.7.7 General                                                                                               |                    |
|    |       |    | d) Proprietary brand materials used for erosion prevention                                                      |                    |
|    | D11.8 |    | LANDSCAPING AND PLANTING PLANTS<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES                            |                    |
|    | D11.9 |    | FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS<br>PART D:<br>GUARANTEES AND COMPLIANCE CERTIFICATES |                    |

**COTO CHAPTER 12: GEOTECHNICAL APPLICATIONS**

| CH | SEC          | CL             | SUB-CLAUSE                                                                     | SPECIFICATION DATA |
|----|--------------|----------------|--------------------------------------------------------------------------------|--------------------|
| 12 |              |                | <b>GEOTECHNICAL APPLICATIONS</b>                                               |                    |
|    | <b>A12.1</b> |                | <b>PILING</b>                                                                  |                    |
|    |              | <b>A12.1.3</b> | <b>A12.1.3.1 Method Statements</b>                                             |                    |
|    |              |                | <b>A12.1.3.2 Materials and materials design</b>                                |                    |
|    |              |                | <b>A12.1.3.4 Pile type and piling layout</b>                                   |                    |
|    |              | <b>A12.1.5</b> | <b>MATERIALS</b>                                                               |                    |
|    |              |                | <b>A12.1.5.2 Concrete and grout</b>                                            |                    |
|    |              |                | <b>A12.1.5.6 Reinforcement steel</b>                                           |                    |
|    |              |                | <b>A12.1.5.10 Steel tubes</b>                                                  |                    |
|    |              | <b>A12.1.6</b> | <b>CONSTRUCTION EQUIPMENT</b>                                                  |                    |
|    |              |                | <b>A12.1.6.1 General</b>                                                       |                    |
|    |              |                | <b>A12.1.6.2 Installation equipment</b>                                        |                    |
|    |              |                | <b>A12.1.6.12 Equipment for precast-, steel tube- or sectional steel piles</b> |                    |
|    |              | <b>A12.1.7</b> | <b>EXECUTION OF WORKS</b>                                                      |                    |
|    |              |                | <b>A12.1.7.1 Test Piles</b>                                                    |                    |
|    |              |                | <b>A12.1.7.5 Construction Tolerances</b>                                       |                    |
|    |              |                | <b>A12.1.7.6 Piling Materials</b>                                              |                    |
|    |              |                | <b>A12.1.7.7 Cast in situ concrete piles</b>                                   |                    |
|    |              |                | <b>b) Formation of holes for piles</b>                                         |                    |
|    |              |                | <b>e) Installation requirements</b>                                            |                    |
|    |              |                | <i>(i) Under slurry piles</i>                                                  |                    |
|    |              |                | <i>(iv) Oscillator piles</i>                                                   |                    |
|    |              |                | <i>(vi) Driven cast in situ piles</i>                                          |                    |
|    |              |                | <b>A12.1.7.8 Precast piles</b>                                                 |                    |
|    |              |                | <b>a) Precast concrete piles</b>                                               |                    |
|    |              |                | <i>(i) General</i>                                                             |                    |
|    |              |                | <i>v) Lengthening of precast piles</i>                                         |                    |
|    |              |                | <b>b) Steel tube piles</b>                                                     |                    |
|    |              |                | <b>f) Driving piles</b>                                                        |                    |

| CH | SEC   | CL       | SUB-CLAUSE                                               | SPECIFICATION DATA |
|----|-------|----------|----------------------------------------------------------|--------------------|
|    |       |          | iv) Preboring/Water jetting                              |                    |
|    |       | A12.1.8. | WORKMANSHIP                                              |                    |
|    |       |          | A12.1.8.1 Tolerances                                     |                    |
|    |       |          | A12.1.8.2 Concrete and grout                             |                    |
|    |       |          | A12.1.8.3 Core drilling                                  |                    |
|    |       |          | A12.1.8.4 Load tests on piles                            |                    |
|    |       |          | a) Static load testing                                   |                    |
|    |       |          | (ii) Loading                                             |                    |
|    |       |          | (iv) Testing self-drilling micro piles                   |                    |
|    |       |          | c) Pile Integrity testing                                |                    |
|    | C12.1 |          | PILING                                                   |                    |
|    |       |          | (ii) Notes on measurement and pay items                  |                    |
|    | D12.1 |          | PILING                                                   |                    |
|    |       | D12.1.2  | GENERAL                                                  |                    |
|    | A12.2 |          | GROUND ANCHORS                                           |                    |
|    |       | A12.2.2  | DEFINITIONS - Secondary Grout                            |                    |
|    |       | A12.2.3  | GENERAL                                                  |                    |
|    |       |          | A12.2.3.1 Method Statements                              |                    |
|    |       |          | A12.2.3.2 Materials and materials design approvals       |                    |
|    |       |          | A12.2.3.3 Additional requirements                        |                    |
|    |       | A12.2.4  | DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS         |                    |
|    |       | A12.2.5  | MATERIALS                                                |                    |
|    |       |          | A12.2.5.1 Materials for cable anchors                    |                    |
|    |       |          | b) Cementitious grout                                    |                    |
|    |       |          | g) Anchor heads and pull bars                            |                    |
|    |       |          | m) Anchor thrust plate                                   |                    |
|    |       |          | p) Cement                                                |                    |
|    |       |          | A12.2.5.2 Materials for rockbolts, dowels and soil nails |                    |
|    |       |          | b) Rockbolts, dowels and soil nails                      |                    |
|    |       | A12.2.7  | EXECUTION OF THE WORKS                                   |                    |
|    |       |          | A12.2.7.2 Cable anchors                                  |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                | SPECIFICATION DATA |
|----|--------------|----------------|-----------------------------------------------------------|--------------------|
|    |              |                | <b>b) Drilling</b>                                        |                    |
|    |              |                | <i>(ii) Drilling Methods</i>                              |                    |
|    |              |                | <b>c) Manufacture</b>                                     |                    |
|    |              |                | <i>(ii) Fabrication</i>                                   |                    |
|    |              | <b>A12.2.8</b> | <b>WORKMANSHIP</b>                                        |                    |
|    |              |                | <b>12.2.8.1 Cable anchors</b>                             |                    |
|    |              |                | <b>12.2.8.2 Rock bolts / Soil nails</b>                   |                    |
|    |              |                | <b>b) Rock bolts/soil nails</b>                           |                    |
|    | <b>C12.2</b> |                | <b>GROUND ANCHORS</b>                                     |                    |
|    |              |                | <i>(ii) Notes on measurement and pay items</i>            |                    |
|    | <b>D12.2</b> |                | <b>GROUND ANCHORS</b>                                     |                    |
|    |              | <b>D12.2.2</b> | <b>GENERAL</b>                                            |                    |
|    | <b>A12.3</b> |                | <b>GROUND IMPROVEMENT</b>                                 |                    |
|    |              | <b>A12.3.3</b> | <b>GENERAL</b>                                            |                    |
|    |              |                | <b>A12.3.3.2 Materials and materials design approvals</b> |                    |
|    |              |                | <b>A12.3.3.4 Jet Grouting</b>                             |                    |
|    |              | <b>A12.3.4</b> | <b>DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS</b>   |                    |
|    |              |                | <b>A12.3.4.1 General</b>                                  |                    |
|    |              |                | <b>A12.3.4.2 Geotechnical grouting</b>                    |                    |
|    |              |                | <b>A12.3.4.3 Jet grouting</b>                             |                    |
|    |              |                | <b>A12.3.4.4 Compaction grouting</b>                      |                    |
|    |              |                | <b>A12.3.4.5 Dynamic Compaction</b>                       |                    |
|    |              |                | <b>A12.3.4.7 Vibration compaction</b>                     |                    |
|    |              |                | <b>A12.3.4.8 Underpinning</b>                             |                    |
|    |              |                | <b>A12.3.4.9 Preloading</b>                               |                    |
|    |              |                | <b>A12.3.4.10 Basal Reinforcement</b>                     |                    |
|    |              | <b>A12.3.5</b> | <b>MATERIALS</b>                                          |                    |
|    |              |                | <b>A12.3.5.1 Geotechnical grouting</b>                    |                    |
|    |              |                | <b>a) Cement/water grouts</b>                             |                    |

| CH | SEC | CL      | SUB-CLAUSE                                         | SPECIFICATION DATA |
|----|-----|---------|----------------------------------------------------|--------------------|
|    |     |         | d) Specialty grouts                                |                    |
|    |     |         | A12.3.5.2 Jet grouting                             |                    |
|    |     |         | A12.3.5.4 Dynamic compaction                       |                    |
|    |     |         | A12.3.5.7 Underpinning                             |                    |
|    |     |         | a) Concrete                                        |                    |
|    |     |         | c) Specialty grouts                                |                    |
|    |     |         | d) Micropiles                                      |                    |
|    |     |         | A12.3.5.8 Preload Monitoring                       |                    |
|    |     |         | b) Bentonite pellets for seal                      |                    |
|    |     |         | A12.3.5.9 Basal reinforcement                      |                    |
|    |     |         | c) Backfill                                        |                    |
|    |     | A12.3.6 | CONSTRUCTION EQUIPMENT                             |                    |
|    |     |         | A12.3.6.8 Pre-loading                              |                    |
|    |     |         | c) Slope stability monitoring                      |                    |
|    |     |         | (i) Inclinometers                                  |                    |
|    |     |         | d) Stability monitoring                            |                    |
|    |     |         | (i) Pore water monitoring – standpipe piezometers  |                    |
|    |     |         | (ii) Pore water monitoring – pneumatic piezometers |                    |
|    |     |         | e) Drilling equipment                              |                    |
|    |     | A12.3.7 | EXECUTION OF THE WORKS                             |                    |
|    |     |         | A12.3.7.1 Geotechnical Grouting                    |                    |
|    |     |         | c) Grouting Process                                |                    |
|    |     |         | (iii) Grout Injection                              |                    |
|    |     |         | A12.3.7.2 Jet grouting                             |                    |
|    |     |         | b) Trials                                          |                    |
|    |     |         | c) Production jet grouting                         |                    |
|    |     |         | A12.3.7.3 Compaction grouting                      |                    |
|    |     |         | d) Testing                                         |                    |
|    |     |         | f) Compaction grout injection                      |                    |
|    |     |         | A12.3.7.4 Dynamic compaction                       |                    |

| CH | SEC | CL             | SUB-CLAUSE                                                         | SPECIFICATION DATA |
|----|-----|----------------|--------------------------------------------------------------------|--------------------|
|    |     |                | <b>c) Construction process</b>                                     |                    |
|    |     |                | <i>(i) Normal Construction</i>                                     |                    |
|    |     |                | <b>A12.3.7.5 Rapid Impact Compaction (RIC)</b>                     |                    |
|    |     |                | <b>c) Construction process</b>                                     |                    |
|    |     |                | <i>(i) Without Stone columns</i>                                   |                    |
|    |     |                | <b>A12.3.7.6 Vibration compaction</b>                              |                    |
|    |     |                | <b>c) Vibro-compaction</b>                                         |                    |
|    |     |                | <b>d) Vibro-replacement</b>                                        |                    |
|    |     |                | <b>A12.3.7.7 Underpinning</b>                                      |                    |
|    |     |                | <b>a) General</b>                                                  |                    |
|    |     |                | <b>b) Process</b>                                                  |                    |
|    |     |                | <b>A12.3.7.8 Preload monitoring</b>                                |                    |
|    |     |                | <b>a) General</b>                                                  |                    |
|    |     |                | <i>(i) Method statements</i>                                       |                    |
|    |     |                | <i>(ii) Labelling and Marking</i>                                  |                    |
|    |     |                | <i>(iv) Frequencies</i>                                            |                    |
|    |     |                | <b>b) Settlement monitoring</b>                                    |                    |
|    |     |                | <i>(i) Settlement monitoring by survey methods</i>                 |                    |
|    |     |                | <i>(ii) Settlement monitoring with magnetic extensometers</i>      |                    |
|    |     |                | <b>c) Slope stability monitoring</b>                               |                    |
|    |     |                | <i>(i) Inclinometers</i>                                           |                    |
|    |     |                | <b>d) Stability monitoring</b>                                     |                    |
|    |     |                | <i>(i) Pore water pressure monitoring - Standpipe piezometers</i>  |                    |
|    |     |                | <b>(ii) Pore water pressure monitoring - Pneumatic piezometers</b> |                    |
|    |     |                | <i>(iii) Soil pressures/loads</i>                                  |                    |
|    |     |                | <b>e) Monitoring records</b>                                       |                    |
|    |     |                | <b>A12.3.7.9 Basal Reinforcement</b>                               |                    |
|    |     |                | <b>a) Transport and storage</b>                                    |                    |
|    |     | <b>A12.3.8</b> | <b>WORKMANSHIP</b>                                                 |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                | SPECIFICATION DATA |
|----|--------------|----------------|-----------------------------------------------------------|--------------------|
|    |              |                | <b>A12.3.8.2 Geotechnical grouting</b>                    |                    |
|    |              |                | <b>b) Testing on fresh cementitious grout</b>             |                    |
|    |              |                | <i>(iii) Strength testing</i>                             |                    |
|    |              |                | <b>c) Acceptance criteria</b>                             |                    |
|    |              |                | <b>A12.3.8.3 Jet grouting</b>                             |                    |
|    |              |                | <b>b) Cementitious grout</b>                              |                    |
|    |              |                | <i>(iii) Strength testing – return grout cubes</i>        |                    |
|    |              |                | <b>c) Acceptance criteria</b>                             |                    |
|    |              |                | <b>A12.3.8.5 Dynamic and rapid impact compaction</b>      |                    |
|    |              |                | <b>a) General</b>                                         |                    |
|    |              |                | <i>(ii) Vibration monitoring</i>                          |                    |
|    |              |                | <b>b) Testing</b>                                         |                    |
|    |              |                | <i>(i) Plate load tests</i>                               |                    |
|    |              |                | <i>(ii) Continuous surface wave tests (CSW)</i>           |                    |
|    | <b>D12.3</b> |                | <b>GROUND IMPROVEMENT</b>                                 |                    |
|    |              | <b>D12.3.2</b> | <b>GENERAL</b>                                            |                    |
|    | <b>A12.4</b> |                | <b>LATERAL SUPPORT</b>                                    |                    |
|    |              | <b>A12.4.3</b> | <b>GENERAL</b>                                            |                    |
|    |              |                | <b>A12.4.3.1 Method Statements</b>                        |                    |
|    |              |                | <b>A12.4.3.2 Materials and materials design approvals</b> |                    |
|    |              |                | <b>A12.4.3.3 Sheet Piling</b>                             |                    |
|    |              |                | <b>A12.4.3.4 Diaphragm walls</b>                          |                    |
|    |              | <b>A12.4.4</b> | <b>DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS</b>   |                    |
|    |              |                | <b>A12.4.4.1 General</b>                                  |                    |
|    |              |                | <b>A12.4.4.2 Sheet Piling</b>                             |                    |
|    |              |                | <b>A12.4.4.3 Diaphragm walls</b>                          |                    |
|    |              | <b>A12.4.5</b> | <b>MATERIALS</b>                                          |                    |
|    |              |                | <b>A12.4.5.1 Sheet Piling</b>                             |                    |
|    |              |                | <b>A12.4.5.2 Diaphragm wall</b>                           |                    |
|    |              |                | <b>b) Cement</b>                                          |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                         | SPECIFICATION DATA |
|----|-------|---------|----------------------------------------------------|--------------------|
|    |       |         | e) Concrete aggregate                              |                    |
|    |       |         | f) Steel                                           |                    |
|    |       | A12.4.7 | EXECUTION OF WORKS                                 |                    |
|    |       |         | A12.4.7.1 Sheet Piling                             |                    |
|    |       |         | b) General                                         |                    |
|    |       |         | <i>vi) Durability of sheet pile sheets</i>         |                    |
|    |       |         | d) Monitoring and records                          |                    |
|    |       |         | A12.4.7.2 Diaphragm wall                           |                    |
|    |       |         | b) Trials                                          |                    |
|    |       |         | c) Construction                                    |                    |
|    |       |         | <i>vii) Concreting</i>                             |                    |
|    |       |         | e) Anchors                                         |                    |
|    |       | A12.4.8 | WORKMANSHIP                                        |                    |
|    |       |         | A12.4.8.1 General                                  |                    |
|    |       |         | A12.4.8.2 Sheet piling                             |                    |
|    |       |         | a) Evaluation of exposed sheet pile walls          |                    |
|    |       |         | b) Pull out test                                   |                    |
|    |       |         | A12.4.8.3 Diaphragm walls                          |                    |
|    |       |         | a) Evaluation of exposed diaphragm panel tops      |                    |
|    |       |         | b) Acceptance criteria                             |                    |
|    |       |         | <i>(i) Concrete Panels</i>                         |                    |
|    |       |         | <i>(ii) Concrete</i>                               |                    |
|    |       |         | A12.4.8.4 Performance Monitoring                   |                    |
|    | D12.4 |         | LATERAL SUPPORT                                    |                    |
|    | A12.5 |         | SHOTCRETE                                          |                    |
|    |       | A12.5.3 | GENERAL                                            |                    |
|    |       |         | A12.5.3.1 Method Statements                        |                    |
|    |       |         | A12.5.3.2 Materials and materials design approvals |                    |
|    |       | A12.5.4 | DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS   |                    |
|    |       |         | A12.5.4.1 General                                  |                    |
|    |       |         | A12.5.4.2 Shotcreting                              |                    |
|    |       |         |                                                    |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                                                                | SPECIFICATION DATA |
|----|-------|---------|-------------------------------------------------------------------------------------------|--------------------|
|    |       | A12.5.5 | MATERIALS                                                                                 |                    |
|    |       |         | A12.5.5.8 Reinforcement                                                                   |                    |
|    |       |         | A12.5.5.9 Compressive strength, ultimate flexural strength and energy absorption capacity |                    |
|    |       |         | A12.5.5.10 Drainage systems, geopipe collectors and weepholes                             |                    |
|    |       | A12.5.7 | EXECUTION OF THE WORKS                                                                    |                    |
|    |       |         | A12.5.7.1 Mix design                                                                      |                    |
|    |       |         | A12.5.7.3 Surface and slope preparation                                                   |                    |
|    |       |         | A12.5.7.17 Aesthetic appearance                                                           |                    |
|    | D12.5 |         | SHOTCRETE                                                                                 |                    |
|    |       | D12.5.2 | GENERAL                                                                                   |                    |
|    | A12.6 |         | MECHANICALLY STABILISED EARTH AND GABIONS                                                 |                    |
|    |       | A12.6.3 | GENERAL                                                                                   |                    |
|    |       |         | A12.6.3.2 Method Statements                                                               |                    |
|    |       |         | A12.6.3.3 Materials and materials design approvals                                        |                    |
|    |       | A12.6.4 | DESIGN BY CONTRACTOR/PERFORMANCE BASED SYSTEMS                                            |                    |
|    |       |         | A12.6.4.1 General                                                                         |                    |
|    |       | A12.6.5 | MATERIALS                                                                                 |                    |
|    |       |         | A12.6.5.1 Materials for MSE walls                                                         |                    |
|    |       |         | b) Concrete facings                                                                       |                    |
|    |       |         | l) Polymeric reinforcement joints                                                         |                    |
|    |       |         | (i) General                                                                               |                    |
|    |       |         | m) Fasteners and connections between facing and reinforcing elements                      |                    |
|    |       |         | (ii) Steel Coatings                                                                       |                    |
|    |       |         | A12.6.5.2 Materials for gabions                                                           |                    |
|    |       |         | i) Alternative materials                                                                  |                    |
|    |       | A12.6.7 | EXECUTION OF THE WORKS                                                                    |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                | SPECIFICATION DATA |
|----|--------------|----------------|-----------------------------------------------------------|--------------------|
|    |              |                | <b>A12.6.7.1 MSE walls and slopes</b>                     |                    |
|    |              |                | <b>b) MSE walls with concrete facings</b>                 |                    |
|    |              |                | <i>(i) Concrete facings</i>                               |                    |
|    |              |                | <b>c) Construction</b>                                    |                    |
|    |              |                | <i>(ii) Foundation</i>                                    |                    |
|    |              |                | <i>(iii) MSE</i>                                          |                    |
|    |              |                | <b>A12.6.7.2 Gabions</b>                                  |                    |
|    |              |                | <b>c) Constructing gabions</b>                            |                    |
|    |              |                | <i>(iii) Assembly</i>                                     |                    |
|    |              | <b>A12.6.8</b> | <b>WORKMANSHIP</b>                                        |                    |
|    |              |                | <b>A12.6.8.1 MSE Walls</b>                                |                    |
|    |              |                | <b>a) Facing foundations</b>                              |                    |
|    |              |                | <b>b) Concrete facings</b>                                |                    |
|    | <b>D12.6</b> |                | <b>MECHANICALLY STABILISED EARTH WALLS AND GABIONS</b>    |                    |
|    |              | <b>D12.6.1</b> | <b>GENERAL</b>                                            |                    |
|    | <b>A12.7</b> |                | <b>TRENCHLESS METHODS</b>                                 |                    |
|    |              | <b>A12.7.3</b> | <b>GENERAL</b>                                            |                    |
|    |              |                | <b>A12.7.3.1 Services and obstructions</b>                |                    |
|    |              |                | <b>A12.7.3.2 Method Statements</b>                        |                    |
|    |              |                | <b>A12.7.3.3 Materials and materials design approvals</b> |                    |
|    |              | <b>A12.7.4</b> | <b>DESIGN BY CONTRACTOR/PERFORMANCE BASED SYSTEMS</b>     |                    |
|    |              |                | <b>A12.7.4.1 General</b>                                  |                    |
|    |              | <b>A12.7.5</b> | <b>MATERIALS</b>                                          |                    |
|    |              |                | <b>A12.7.5.1 General</b>                                  |                    |
|    |              |                | <b>A12.7.5.4 Pipe ramming and Micro-tunnelling</b>        |                    |
|    |              | <b>A12.7.6</b> | <b>CONSTRUCTION EQUIPMENT</b>                             |                    |
|    |              |                | <b>A12.7.6.4 Micro-tunnelling boring machine</b>          |                    |
|    |              |                | <b>b) Performance requirements</b>                        |                    |
|    |              | <b>A12.7.7</b> | <b>EXECUTION OF THE WORKS</b>                             |                    |
|    |              |                | <b>A12.7.7.1 Pipe jacking</b>                             |                    |
|    |              |                | <b>c) Process</b>                                         |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                                                      | SPECIFICATION DATA |
|----|-------|---------|---------------------------------------------------------------------------------|--------------------|
|    |       | A12.7.8 | WORKMANSHIP                                                                     |                    |
|    |       |         | A12.7.8.1 Pipe jacking, directional drilling, pipe ramming and micro-tunnelling |                    |
|    | D12.7 |         | TRENCHLESS METHODS                                                              |                    |
|    |       | D12.7.2 | GENERAL                                                                         |                    |
|    | A12.8 |         | GROUND DRAINAGE                                                                 |                    |
|    |       | A12.8.1 | SCOPE                                                                           |                    |
|    |       | A12.8.3 | GENERAL                                                                         |                    |
|    |       |         | A12.8.3.1 Method Statements                                                     |                    |
|    |       |         | A12.8.3.2 Materials and materials design approvals                              |                    |
|    |       |         | A12.8.3.3 Wells                                                                 |                    |
|    |       |         | A12.8.3.6 Geosynthetic drains                                                   |                    |
|    |       | A12.8.4 | DESIGN BY CONTRACTOR/PERFORMANCE BASED SYSTEMS                                  |                    |
|    |       |         | A12.8.4.1 General                                                               |                    |
|    |       |         | A12.8.4.2 Typically specified items                                             |                    |
|    |       |         | A12.8.4.3 Available information                                                 |                    |
|    |       |         | A12.8.4.4 Additional requirements                                               |                    |
|    |       | A12.8.5 | MATERIALS                                                                       |                    |
|    |       |         | A12.8.5.2 Wells                                                                 |                    |
|    |       |         | c) Base station                                                                 |                    |
|    |       |         | A12.8.5.3 Horizontal drains                                                     |                    |
|    |       |         | a) General                                                                      |                    |
|    |       |         | b) Drainage pipes/borehole liners                                               |                    |
|    |       | A12.8.6 | CONSTRUCTION EQUIPMENT                                                          |                    |
|    |       |         | A12.8.6.2 Horizontal drains                                                     |                    |
|    |       | A12.8.7 | EXECUTION OF THE WORKS                                                          |                    |
|    |       |         | A12.8.7.1 Wells                                                                 |                    |
|    |       |         | a) General                                                                      |                    |
|    |       |         | c) Process                                                                      |                    |
|    |       |         | A12.8.7.2 Horizontal drains                                                     |                    |
|    |       |         | b) Trials                                                                       |                    |
|    |       |         | c) Process                                                                      |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                      | SPECIFICATION DATA |
|----|--------------|----------------|-----------------------------------------------------------------|--------------------|
|    |              |                | <b>A12.8.7.4 Vertical band / Wick drains</b>                    |                    |
|    |              |                | a) General                                                      |                    |
|    |              |                | b) Trials                                                       |                    |
|    |              |                | c) Process                                                      |                    |
|    |              |                | <b>A12.8.7.5 Geosynthetic/blanket drains</b>                    |                    |
|    |              |                | a) General                                                      |                    |
|    |              | <b>A12.8.8</b> | <b>WORKMANSHIP</b>                                              |                    |
|    | <b>D12.8</b> |                | <b>GROUND DRAINAGE</b>                                          |                    |
|    |              | <b>D12.8.2</b> | <b>GENERAL</b>                                                  |                    |
|    | <b>A12.9</b> |                | <b>SLOPE PROTECTION MEASURES</b>                                |                    |
|    |              | <b>A12.9.3</b> | <b>GENERAL</b>                                                  |                    |
|    |              |                | <b>A12.9.3.2 Method Statements</b>                              |                    |
|    |              |                | <b>A12.9.3.3 Materials and materials design approvals</b>       |                    |
|    |              | <b>A12.9.4</b> | <b>DESIGN BY CONTRACTOR/PERFORMANCE BASED SYSTEMS</b>           |                    |
|    |              | <b>A12.9.5</b> | <b>MATERIALS</b>                                                |                    |
|    |              |                | <b>A12.9.5.2 Rockfall netting</b>                               |                    |
|    |              |                | <b>A12.9.5.3 Catch fences</b>                                   |                    |
|    |              |                | <b>A12.9.5.4 Shallow landslide fences</b>                       |                    |
|    |              |                | <b>A12.9.5.5 Debris flow fences</b>                             |                    |
|    |              | <b>A12.9.7</b> | <b>EXECUTION OF THE WORKS</b>                                   |                    |
|    |              |                | <b>A12.9.7.1 General</b>                                        |                    |
|    |              |                | a) Method statements                                            |                    |
|    |              |                | c) Traffic control and lane closure                             |                    |
|    |              |                | d) Cordoning off the works area                                 |                    |
|    |              |                | f) Access for inspections, mapping, setting out and testing     |                    |
|    |              |                | <b>A12.9.7.2 Process</b>                                        |                    |
|    |              |                | b) Anchoring of slope protection installations                  |                    |
|    |              |                | c) Installation of draped wire mesh rockfall netting revetments |                    |

| CH | SEC    | CL        | SUB-CLAUSE                                                                      | SPECIFICATION DATA |
|----|--------|-----------|---------------------------------------------------------------------------------|--------------------|
|    |        |           | d) Installation of anchored wire mesh rockfall netting revetments               |                    |
|    |        |           | e) Installation of catch fences shallow landslide fences and debris flow fences |                    |
|    | D12.9  |           | SLOPE PROTECTION MEASURES                                                       |                    |
|    |        | D12.9.2   | GENERAL                                                                         |                    |
|    | A12.10 |           | HARD EXCAVATION BY BLASTING                                                     |                    |
|    |        | A12.10.2  | DEFINITIONS                                                                     |                    |
|    |        |           | Pre-splitting                                                                   |                    |
|    |        | A12.10.3  | GENERAL                                                                         |                    |
|    |        |           | A12.10.3.1 Method Statements                                                    |                    |
|    |        |           | A12.10.3.2 Materials, design and process approvals                              |                    |
|    |        |           | A12.10.7.3 Process                                                              |                    |
|    |        |           | b) Drilling                                                                     |                    |
|    | D12.10 |           | HARD EXCAVATION BY BLASTING                                                     |                    |
|    | A12.11 |           | GEOSYNTHETICS                                                                   |                    |
|    |        | A12.11.3  | GENERAL                                                                         |                    |
|    |        | A12.11.5  | MATERIALS                                                                       |                    |
|    |        |           | A12.11.5.1 General                                                              |                    |
|    | D12.11 |           | GEOSYNTHETICS                                                                   |                    |
|    | A12.12 |           | CONSTRUCTION DEWATERING                                                         |                    |
|    |        | A12.12.3  | GENERAL                                                                         |                    |
|    |        |           | A12.12.3.1 General                                                              |                    |
|    |        |           | A12.12.3.3 Materials and materials design approvals                             |                    |
|    |        | A12.12.4  | DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS                                |                    |
|    |        | A12.12.5  | MATERIALS                                                                       |                    |
|    |        | A12.12.6  | CONSTRUCTION EQUIPMENT                                                          |                    |
|    |        |           | A12.12.6.1 Requirements/ Capability                                             |                    |
|    |        |           | A12.12.6.3 Flow meters                                                          |                    |
|    |        | A 12.12.7 | EXECUTION OF THE WORKS                                                          |                    |
|    |        |           | A12.12.7.1 General                                                              |                    |

| CH | SEC    | CL       | SUB-CLAUSE                                                          | SPECIFICATION DATA |
|----|--------|----------|---------------------------------------------------------------------|--------------------|
|    |        |          | a) Method statement/Dewatering Plan                                 |                    |
|    |        |          | b) Trials for well system installations                             |                    |
|    |        |          | A12.12.7.2 Process                                                  |                    |
|    |        |          | a) Operational requirements                                         |                    |
|    |        |          | A12.12.7.3 Monitoring ground water levels and potential settlements |                    |
|    |        |          | A12.12.7.4 Monitoring ground water discharge                        |                    |
|    |        | A12.12.8 | WORKMANSHIP                                                         |                    |
|    | D12.12 |          | CONSTRUCTION DEWATERING                                             |                    |

**COTO CHAPTER 13: STRUCTURES**

| CH | SEC   | CL      | SUB-CLAUSE                                           | SPECIFICATION DATA |
|----|-------|---------|------------------------------------------------------|--------------------|
| 13 |       |         | <b>STRUCTURES</b>                                    |                    |
|    | A13.1 |         | <b>FOUNDATIONS</b>                                   |                    |
|    |       | A13.1.3 | <b>GENERAL</b>                                       |                    |
|    |       |         | A13.1.3.2 Channel preservation                       |                    |
|    |       |         | a) Work on, over, in or adjacent to watercourses     |                    |
|    |       |         | (i) General                                          |                    |
|    |       |         | (iv) Water quality requirements                      |                    |
|    |       |         | A13.1.3.4 Method Statements                          |                    |
|    |       |         | A13.1.3.5 Hold points                                |                    |
|    |       | A13.1.5 | <b>MATERIALS</b>                                     |                    |
|    |       |         | A13.1.5.8 Soil cement                                |                    |
|    |       | A13.1.7 | <b>EXECUTION OF THE WORKS</b>                        |                    |
|    |       |         | A13.1.7.1 Work access and drainage                   |                    |
|    |       |         | a) General                                           |                    |
|    |       |         | A13.1.7.2 Excavation                                 |                    |
|    |       |         | a) General                                           |                    |
|    |       |         | g) The safety and protection of excavations          |                    |
|    |       |         | j) Work on, over, under or adjacent to railway lines |                    |
|    |       |         | A13.1.7.5 Backfill and fill near structures          |                    |
|    |       |         | a) General                                           |                    |
|    |       |         | b) Backfill                                          |                    |
|    |       |         | d) Fill within restricted area                       |                    |
|    |       |         | A13.1.7.6 Foundation fill                            |                    |
|    |       |         | A13.1.7.7 Grouting of rock fissures                  |                    |
|    |       |         | A13.1.7.8 Foundation dowels                          |                    |
|    |       |         | A13.1.7.10 Caissons                                  |                    |
|    |       |         | a) General                                           |                    |
|    |       |         | b) Construction and sinking                          |                    |
|    |       |         | c) Founding                                          |                    |
|    |       |         | e) Filling the caissons                              |                    |
|    |       |         | i) Concrete seal                                     |                    |
|    |       |         | g) Concrete blinding below the caisson cover slabs   |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                      | SPECIFICATION DATA |
|----|--------------|----------------|-----------------------------------------------------------------|--------------------|
|    | <b>B13.1</b> |                | <b>FOUNDATIONS</b>                                              |                    |
|    |              | <b>B13.1.7</b> | <b>EXECUTION OF THE WORKS</b>                                   |                    |
|    |              |                | <b>B13.1.7.2 Excavation</b>                                     |                    |
|    |              |                | <b>a) General</b>                                               |                    |
|    | <b>D13.1</b> |                | <b>FOUNDATIONS</b>                                              |                    |
|    | <b>A13.2</b> |                | <b>FALSEWORK, FORMWORK AND CONCRETE FINISH</b>                  |                    |
|    |              | <b>A13.2.3</b> | <b>GENERAL</b>                                                  |                    |
|    |              |                | <b>A13.2.3.1 Method Statements</b>                              |                    |
|    |              |                | <b>A13.2.3.2 Hold points and approvals</b>                      |                    |
|    |              | <b>A13.2.5</b> | <b>MATERIALS</b>                                                |                    |
|    |              |                | <b>A13.2.5.3 Formwork</b>                                       |                    |
|    |              |                | <b>a) Tongue-and-groove boarding</b>                            |                    |
|    |              |                | <b>c) Void formers</b>                                          |                    |
|    |              | <b>A13.2.7</b> | <b>EXECUTION OF THE WORKS</b>                                   |                    |
|    |              |                | <b>A13.2.7.2 Formwork</b>                                       |                    |
|    |              |                | <b>a) General</b>                                               |                    |
|    |              |                | <b>b) Formed surfaces: Classes of finish</b>                    |                    |
|    |              |                | <i>(i) General</i><br>3. Class F3 surface finish                |                    |
|    |              |                | <b>d) Formwork for open joints</b>                              |                    |
|    |              |                | <b>e) Openings and wall chases</b>                              |                    |
|    |              |                | <b>f) Sliding formwork</b>                                      |                    |
|    |              |                | <i>(i) Plant and equipment</i>                                  |                    |
|    |              |                | <i>(ii) Instrumentation and monitoring</i>                      |                    |
|    |              |                | <b>A13.2.7.3 Removing the Falsework and Formwork</b>            |                    |
|    |              |                | <b>b) Technical criteria for falsework and formwork removal</b> |                    |
|    | <b>D13.2</b> |                | <b>FALSEWORK, FORMWORK AND CONCRETE FINISH</b>                  |                    |
|    |              | <b>D13.2.3</b> | <b>PERFORMANCE GUARANTEE REQUIREMENTS</b>                       |                    |
|    |              |                | <b>D13.2.3.2 Performance specifications</b>                     |                    |
|    | <b>A13.3</b> |                | <b>STEEL REINFORCEMENT</b>                                      |                    |
|    |              | <b>A13.3.3</b> | <b>GENERAL</b>                                                  |                    |
|    |              |                | <b>A13.3.3.1 Method Statements</b>                              |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                                              | SPECIFICATION DATA |
|----|-------|---------|-------------------------------------------------------------------------|--------------------|
|    |       |         | A13.3.3.2 Hold points and approvals                                     |                    |
|    |       | A13.3.5 | MATERIALS                                                               |                    |
|    |       |         | A13.3.5.1 Steel bars                                                    |                    |
|    |       | A13.3.7 | EXECUTION OF THE WORKS                                                  |                    |
|    |       |         | A13.3.7.3 Placing and fixing                                            |                    |
|    |       |         | A13.3.7.4 Cover and supports                                            |                    |
|    |       |         | A13.3.7.5 Laps and joints                                               |                    |
|    |       | A13.3.8 | WORKMANSHIP                                                             |                    |
|    |       |         | A13.3.8.2 Welding                                                       |                    |
|    |       |         | A13.3.8.4 Tolerances                                                    |                    |
|    |       |         | c) Spacing between bars                                                 |                    |
|    | D13.3 |         | STEEL REINFORCEMENT                                                     |                    |
|    |       | D13.3.3 | PERFORMANCE GUARANTEE REQUIREMENTS                                      |                    |
|    |       |         | D13.3.3.2 Performance specifications                                    |                    |
|    | A13.4 |         | CONCRETE                                                                |                    |
|    |       | A13.4.3 | GENERAL                                                                 |                    |
|    |       |         | A13.4.3.1 Method Statements                                             |                    |
|    |       |         | A13.4.3.2 Hold points and approvals                                     |                    |
|    |       | A13.4.5 | MATERIALS                                                               |                    |
|    |       |         | A13.4.5.1 Cementitious binder                                           |                    |
|    |       |         | c) Particular requirements for prestressed concrete                     |                    |
|    |       |         | A13.4.5.2 Aggregates                                                    |                    |
|    |       |         | a) Coarse aggregates                                                    |                    |
|    |       |         | A13.4.5.5 Integral permeability reducing technology                     |                    |
|    |       | A13.4.7 | EXECUTION OF THE WORKS                                                  |                    |
|    |       |         | A13.4.7.8 Prescribed-Composition (Class P) concrete                     |                    |
|    |       |         | A13.4.7.10 Properties of hardened concrete                              |                    |
|    |       |         | d) Energy absorption capacity of fibre reinforced concrete              |                    |
|    |       |         | A13.4.7.11 Protection of Concrete from Adverse Environmental Conditions |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                       | SPECIFICATION DATA |
|----|-------|---------|--------------------------------------------------|--------------------|
|    |       |         | f) Concrete exposed to aggressive water or soil  |                    |
|    |       |         | A13.4.7.12 Placing and Compaction                |                    |
|    |       |         | a) Placing                                       |                    |
|    |       |         | g) Construction joints                           |                    |
|    |       |         | (iv) Waterstops                                  |                    |
|    |       |         | h) Curing and surface protection                 |                    |
|    |       |         | i) Pipes, ferrules and conduits                  |                    |
|    |       |         | k) Precast concrete                              |                    |
|    |       |         | (i) Manufacturing                                |                    |
|    |       |         | (ii) Safety considerations                       |                    |
|    |       |         | 2. Temporary supports                            |                    |
|    | D13.4 |         | CONCRETE                                         |                    |
|    |       | D13.4.3 | PERFORMANCE GUARANTEE REQUIREMENTS               |                    |
|    |       |         | D13.4.3.1 Performance specifications             |                    |
|    | A13.5 |         | PRESTRESSING                                     |                    |
|    |       | A13.5.3 | GENERAL                                          |                    |
|    |       |         | A13.5.4.1 Method Statements                      |                    |
|    |       |         | A13.5.4.2 Hold points and approvals              |                    |
|    |       |         | A13.5.4.3 Technical data                         | a)                 |
|    |       | A13.5.5 | MATERIALS                                        |                    |
|    |       |         | A13.5.5.2 Prestressing steel                     |                    |
|    |       |         | f) Galvanising                                   |                    |
|    |       |         | A13.5.5.4 Sheaths                                |                    |
|    |       | A13.5.7 | EXECUTION OF THE WORKS                           |                    |
|    |       |         | A13.5.7.3 Post-tensioning                        |                    |
|    |       |         | e) Tensioning                                    |                    |
|    |       |         | (ii) Tensioning sequence                         |                    |
|    |       |         | f) Permanent protection and bonding of tendons   |                    |
|    |       |         | (i) General                                      |                    |
|    | A13.6 |         | BEARINGS                                         |                    |
|    |       | A13.6.4 | DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                    | SPECIFICATION DATA |
|----|--------------|----------------|---------------------------------------------------------------|--------------------|
|    |              |                | <b>A13.6.4.1 Design of elastomeric bearings</b>               |                    |
|    |              |                | <b>a) Technical data</b>                                      |                    |
|    |              |                | <b>A13.6.4.2 Design of proprietary bearings</b>               |                    |
|    |              |                | <b>b) Technical data</b>                                      |                    |
|    |              |                | <b>f) Design</b>                                              |                    |
|    |              | <b>A13.6.5</b> | <b>MATERIALS</b>                                              |                    |
|    |              |                | <b>A13.6.5.1 Bearings in structures</b>                       |                    |
|    |              |                | <b>a) General</b>                                             |                    |
|    |              |                | <b>c) Elastomer</b>                                           |                    |
|    |              |                | (i) General                                                   |                    |
|    |              |                | <b>g) Proprietary mortars</b>                                 |                    |
|    |              |                | (iii) Mortar Thickness under bearings                         |                    |
|    |              | <b>A13.6.7</b> | <b>EXECUTION OF THE WORKS</b>                                 |                    |
|    |              |                | <b>A13.6.7.1 Concrete hinges</b>                              |                    |
|    |              |                | <b>A13.6.7.3 Proprietary bearings</b>                         |                    |
|    |              |                | <b>a) General</b>                                             |                    |
|    |              |                | <b>b) Manufacture</b>                                         |                    |
|    |              |                | <b>e) Installation</b>                                        |                    |
|    | <b>D13.6</b> |                | <b>BEARINGS</b>                                               |                    |
|    |              | <b>D13.6.3</b> | <b>PERFORMANCE GUARANTEE REQUIREMENTS</b>                     |                    |
|    |              |                | <b>D13.6.3.2 Performance specifications</b>                   |                    |
|    | <b>A13.7</b> |                | <b>JOINTS</b>                                                 |                    |
|    |              | <b>A13.7.3</b> | <b>GENERAL</b>                                                |                    |
|    |              |                | <b>A13.7.3.1 Method Statements</b>                            |                    |
|    |              |                | <b>A13.7.3.2 Hold points and approvals</b>                    |                    |
|    |              | <b>A13.7.4</b> | <b>DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS</b>       |                    |
|    |              |                | <b>A13.7.4.1 Design and manufacture of proprietary joints</b> |                    |
|    |              | <b>A13.7.5</b> | <b>MATERIALS</b>                                              |                    |
|    |              |                | <b>A13.7.5.1 Joints in structures</b>                         |                    |
|    |              |                | <b>d) Waterstops</b>                                          |                    |
|    |              | <b>A13.7.7</b> | <b>EXECUTION OF THE WORKS</b>                                 |                    |
|    |              |                | <b>A13.7.7.1 Filled and unfilled joints</b>                   |                    |
|    |              |                | <b>b) Filled joints</b>                                       |                    |

| CH | SEC   | CL      | SUB-CLAUSE                                                                                | SPECIFICATION DATA |
|----|-------|---------|-------------------------------------------------------------------------------------------|--------------------|
|    |       |         | c) Unfilled joints                                                                        |                    |
|    |       |         | d) Concrete nosings forming the edges of expansion joints shall be constructed as follows |                    |
|    |       |         | A13.7.7.2 Asphaltic plug proprietary type expansion joint systems                         |                    |
|    |       |         | A13.7.7.3 Sealing the joints                                                              |                    |
|    |       |         | a) General                                                                                |                    |
|    |       |         | b) Preparing the joints                                                                   |                    |
|    |       |         | A13.7.7.4 Proprietary expansion joints                                                    |                    |
|    |       |         | b) Dimensions                                                                             |                    |
|    |       |         | c) Installing the expansion joints                                                        |                    |
|    | D13.7 |         | JOINTS                                                                                    |                    |
|    |       | D13.7.3 | PERFORMANCE GUARANTEE REQUIREMENTS                                                        |                    |
|    |       |         | D13.7.3.2 Performance specifications                                                      |                    |
|    | A13.8 |         | ANCILLARY STRUCTURAL ELEMENTS                                                             |                    |
|    |       | A13.8.7 | EXECUTION OF THE WORKS                                                                    |                    |
|    |       |         | A13.8.7.1 Barriers, parapets, railings and sidewalks                                      |                    |
|    |       |         | a) Concrete barriers and parapets                                                         |                    |
|    |       |         | b) Steel railings                                                                         |                    |
|    |       |         | d) Numbers for structures                                                                 |                    |
|    |       |         | (i) Number plates                                                                         |                    |
|    |       |         | (ii) Painted numbers                                                                      |                    |
|    |       |         | (iii) Numbers shaped in concrete                                                          |                    |
|    |       |         | f) Service Ducts in Sidewalks and Structures                                              |                    |
|    |       |         | h) Transition blocks                                                                      |                    |
|    |       |         | A13.8.7.2 Drainage for structures                                                         |                    |
|    |       |         | a) Weep holes, drainage pipes and channels                                                |                    |
|    |       |         | c) Synthetic filter fabric                                                                |                    |
|    |       |         | d) Crushed stone in drainage strips behind walls                                          |                    |

| CH | SEC           | CL              | SUB-CLAUSE                                                | SPECIFICATION DATA |
|----|---------------|-----------------|-----------------------------------------------------------|--------------------|
|    |               |                 | <b>A13.8.7.3 Bolt groups for electrification brackets</b> |                    |
|    | <b>D13.8</b>  |                 | <b>ANCILLARY STRUCTURAL ELEMENTS</b>                      |                    |
|    |               | <b>D13.8.3</b>  | <b>PERFORMANCE GUARANTEE REQUIREMENTS</b>                 |                    |
|    |               |                 | <b>D13.8.3.2 Performance specifications</b>               |                    |
|    | <b>A13.9</b>  |                 | <b>STRUCTURAL STEELWORK FOR MINOR STRUCTURES</b>          |                    |
|    |               | <b>A13.9.7</b>  | <b>EXECUTION OF THE WORKS</b>                             |                    |
|    |               |                 | <b>A13.9.7.1 Fabrication and assembly</b>                 |                    |
|    |               |                 | <b>a) General</b>                                         |                    |
|    |               |                 | <b>f) Hollow sections</b>                                 |                    |
|    |               |                 | <b>(m) Corrosion Prevention</b>                           |                    |
|    |               |                 | <i>(i) Painting</i>                                       |                    |
|    |               |                 | <i>(ii) Sprayed metal coatings</i>                        |                    |
|    |               |                 | <b>A13.9.7.2 Erection</b>                                 |                    |
|    |               |                 | <b>a) General</b>                                         |                    |
|    | <b>D13.9</b>  |                 | <b>STRUCTURAL STEEL WORK FOR MINOR STRUCTURES</b>         |                    |
|    |               | <b>D13.9.3</b>  | <b>PERFORMANCE GUARANTEE REQUIREMENTS</b>                 |                    |
|    |               |                 | <b>D13.9.3.2 Performance specifications</b>               |                    |
|    | <b>A13.10</b> |                 | <b>PAINTING OF MINOR STRUCTURES</b>                       |                    |
|    |               | <b>A13.10.5</b> | <b>MATERIALS</b>                                          |                    |
|    |               |                 | <b>A13.10.5.3 Finishing coats</b>                         |                    |
|    |               | <b>A13.10.7</b> | <b>EXECUTION OF THE WORKS</b>                             |                    |
|    |               |                 | <b>A13.10.7.1 General</b>                                 |                    |
|    |               |                 | <b>A13.10.7.2 Applying the paint</b>                      |                    |
|    |               |                 | <b>A13.10.7.5 Painting structural steel</b>               |                    |
|    |               |                 | <b>a) General</b>                                         |                    |
|    |               |                 | <b>A13.10.7.6 Painting guard rails</b>                    |                    |
|    |               |                 | <b>a) General</b>                                         |                    |
|    | <b>D13.10</b> |                 | <b>PAINTING OF MINOR STRUCTURES</b>                       |                    |

| CH | SEC    | CL       | SUB-CLAUSE                                                         | SPECIFICATION DATA |
|----|--------|----------|--------------------------------------------------------------------|--------------------|
|    |        | D13.10.3 | PERFORMANCE<br>GUARANTEE<br>REQUIREMENTS                           |                    |
|    |        |          | D13.10.3.2<br>Performance<br>specifications                        |                    |
|    | A13.11 |          | STRUCTURAL<br>STEELWORK FOR<br>MAJOR STRUCTURES                    |                    |
|    |        | A13.11.5 | MATERIALS                                                          |                    |
|    |        |          | A13.11.5.5 Bolts                                                   |                    |
|    |        | A13.11.7 | EXECUTION OF THE<br>WORKS                                          |                    |
|    |        |          | A13.11.7.1 Welding                                                 |                    |
|    |        |          | d) Stud shear<br>connectors: Welding<br>and procedure trials       |                    |
|    | D13.11 |          | STRUCTURAL<br>STEELWORK FOR<br>MAJOR STRUCTURES                    |                    |
|    |        | D13.11.3 | PERFORMANCE<br>GUARANTEE<br>REQUIREMENTS                           |                    |
|    |        |          | D13.11.3.2<br>Performance<br>specifications                        |                    |
|    | A13.12 |          | STRUCTURAL STEEL<br>PROTECTIVE<br>TREATMENT OF<br>MAJOR STRUCTURES |                    |
|    |        | A13.12.7 | EXECUTION OF THE<br>WORKS                                          |                    |
|    |        |          | A13.12.7.15 Specified<br>paint systems                             |                    |
|    |        |          | b) System 1                                                        |                    |
|    |        |          | c) System 2:                                                       |                    |
|    |        |          | f) System 5:                                                       |                    |
|    | D13.12 |          | STRUCTURAL STEEL<br>PROTECTIVE<br>TREATMENT OF<br>MAJOR STRUCTURES |                    |
|    |        | D13.12.3 | PERFORMANCE<br>GUARANTEE<br>REQUIREMENTS                           |                    |
|    |        |          | D13.12.3.2<br>Performance<br>specifications                        |                    |
|    | A13.13 |          | INCREMENTAL<br>LAUNCHING OF<br>BRIDGE DECKS                        |                    |
|    |        | A13.13.6 | CONSTRUCTION<br>EQUIPMENT                                          |                    |
|    |        |          | A13.13.6.4 Emergency<br>facilities                                 |                    |
|    |        | A13.13.7 | EXECUTION OF THE<br>WORKS                                          |                    |
|    |        |          | A13.13.7.1 Deck<br>construction area                               |                    |

| CH | SEC           | CL              | SUB-CLAUSE                                                | SPECIFICATION DATA |
|----|---------------|-----------------|-----------------------------------------------------------|--------------------|
|    |               |                 | <b>A13.13.7.2 Formwork assembly</b>                       |                    |
|    |               |                 | <b>A13.13.7.3 Launching girder</b>                        |                    |
|    |               |                 | <b>a) Design</b>                                          |                    |
|    |               |                 | <b>A13.13.7.4 Temporary bearings, guides and pads</b>     |                    |
|    |               |                 | <b>a) Temporary bearings and guides</b>                   |                    |
|    |               |                 | <i>(i) Design and fabrication</i>                         |                    |
|    |               |                 | <i>(ii) Installation and adjustment</i>                   |                    |
|    |               |                 | <i>(iii) Tolerances</i>                                   |                    |
|    |               |                 | <b>b) Elastomeric launching bearing pads</b>              |                    |
|    |               |                 | <b>A13.13.7.6 Temporary supports</b>                      |                    |
|    |               |                 | <b>A13.13.7.7 Stays</b>                                   |                    |
|    |               |                 | <b>A13.13.7.8 Deck construction</b>                       |                    |
|    |               |                 | <b>g) Construction of deck diaphragms</b>                 |                    |
|    |               |                 | <b>i) Installation of permanent bearings</b>              |                    |
|    |               |                 | <b>j) Construction of parapets, sidewalks and medians</b> |                    |
|    | <b>A13.14</b> |                 | <b>SPECIALIST STRUCTURES</b>                              |                    |
|    |               | <b>A13.14.3</b> | <b>GENERAL</b>                                            |                    |

**COTO CHAPTER 14: REPAIR AND REHABILITATION OF STRUCTURES**

| CH | SEC   | CL      | SUB-CLAUSE                                                               | SPECIFICATION DATA |
|----|-------|---------|--------------------------------------------------------------------------|--------------------|
| 14 |       |         | REPAIR AND REHABILITATION OF STRUCTURES                                  |                    |
|    | A14.1 |         | ACCESS FOR BRIDGE REHABILITATION                                         |                    |
|    |       | A14.1.3 | GENERAL                                                                  |                    |
|    | D14.1 |         | ACCESS FOR BRIDGE REHABILITATION                                         |                    |
|    |       | D14.1.3 | PERFORMANCE GUARANTEE REQUIREMENTS                                       |                    |
|    |       |         | D14.1.3.2 Performance specifications                                     |                    |
|    | A14.2 |         | CORROSION SURVEY METHODS AND TESTING OF NEAR SURFACE CONCRETE PROPERTIES |                    |
|    |       | A14.2.1 | SCOPE                                                                    |                    |
|    |       | A14.2.7 | EXECUTION OF THE WORKS                                                   |                    |
|    |       |         | A14.2.7.4 Ingress of aggressive chemicals or environmental agents        |                    |
|    |       |         | a) Carbonation depth                                                     |                    |
|    |       |         | (i) Extraction of core sample                                            |                    |
|    | D14.2 |         | CORROSION SURVEY METHODS AND TESTING OF NEAR SURFACE CONCRETE PROPERTIES |                    |
|    | A14.3 |         | DEMOLITION AND REMOVAL OF STRUCTURAL CONCRETE AND STEELWORK              |                    |
|    |       | A14.3.7 | EXECUTION OF THE WORKS                                                   |                    |
|    |       |         | A14.3.7.1 Sequence of execution                                          |                    |
|    |       |         | A14.3.7.4 Removal of concrete from structural elements                   |                    |
|    |       |         | a) Cutting back concrete to a new finished surface                       |                    |
|    |       |         | b) Cutting back concrete to expose reinforcement                         |                    |
|    |       |         | A14.3.7.5 Removal of structural steel elements from existing structures  |                    |
|    | D14.3 |         | DEMOLITION AND REMOVAL OF                                                |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                                  | SPECIFICATION DATA |
|----|--------------|----------------|-----------------------------------------------------------------------------|--------------------|
|    |              |                | <b>STRUCTURAL<br/>CONCRETE AND<br/>STEELWORK</b>                            |                    |
|    | <b>A14.4</b> |                | <b>SURFACE AND<br/>STRUCTURAL REPAIR<br/>OF CONCRETE<br/>MEMBERS</b>        |                    |
|    |              | <b>A14.4.5</b> | <b>MATERIALS</b>                                                            |                    |
|    |              |                | <b>A14.4.5.2</b><br>Cementitious mortar<br>or concrete                      |                    |
|    |              |                | d) Performance<br>requirements for<br>cementitious mortar or<br>concrete    |                    |
|    |              |                | <b>A14.4.5.5</b> Proprietary<br>cementitious repair<br>systems              |                    |
|    |              |                | d) Curing of repaired<br>surface                                            |                    |
|    |              | <b>A14.4.7</b> | <b>EXECUTION OF THE<br/>WORKS</b>                                           |                    |
|    |              |                | <b>A14.4.7.3</b> Batching<br>and Mixing                                     |                    |
|    |              |                | d) Proprietary<br>cementitious repair<br>compounds                          |                    |
|    |              | <b>A14.4.8</b> | <b>WORKMANSHIP</b>                                                          |                    |
|    |              |                | <b>A14.4.8.1</b> Tolerances                                                 |                    |
|    |              |                | <b>A14.4.8.2</b> Testing                                                    |                    |
|    |              |                | d) Acceptance testing                                                       |                    |
|    | <b>D14.4</b> |                | <b>SURFACE AND<br/>STRUCTURAL REPAIR<br/>OF CONCRETE<br/>MEMBERS</b>        |                    |
|    |              | <b>D14.4.3</b> | <b>PERFORMANCE<br/>GUARANTEE<br/>REQUIREMENTS</b>                           |                    |
|    |              |                | <b>D14.4.3.2</b> Performance<br>specifications                              |                    |
|    | <b>A14.5</b> |                | <b>ANCHORING OF<br/>REINFORCEMENT,<br/>GROUTING AND<br/>CRACK INJECTION</b> |                    |
|    |              | <b>A14.5.5</b> | <b>MATERIALS</b>                                                            |                    |
|    |              |                | <b>A14.5.5.1</b> Anchoring<br>adhesive                                      |                    |
|    |              |                | <b>A14.5.5.2</b> Grout                                                      |                    |
|    |              |                | c) Working<br>characteristics of<br>grout                                   |                    |
|    |              |                | (ii) Strength<br>development, cure time<br>and environmental<br>conditions  |                    |
|    |              |                | <b>A14.5.5.3</b> Crack<br>injection and crack<br>filling                    |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                                                                          | SPECIFICATION DATA |
|----|--------------|----------------|---------------------------------------------------------------------------------------------------------------------|--------------------|
|    |              |                | <b>e) Mechanical properties of cured injectable adhesive</b>                                                        |                    |
|    |              |                | <i>(i) Moisture resistance</i>                                                                                      |                    |
|    |              | <b>A14.5.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                                       |                    |
|    |              |                | <b>A14.5.7.2 Grouting</b>                                                                                           |                    |
|    |              |                | <b>e) Batching and mixing</b>                                                                                       |                    |
|    | <b>D14.5</b> |                | <b>ANCHORING OF REINFORCEMENT, GROUTING AND CRACK INJECTION</b>                                                     |                    |
|    |              | <b>D14.5.3</b> | <b>PERFORMANCE GUARANTEE REQUIREMENTS</b>                                                                           |                    |
|    |              |                | <b>D14.5.3.1 Performance specifications</b>                                                                         |                    |
|    | <b>A14.6</b> |                | <b>SPRAYED CONCRETE FOR STRUCTURES</b>                                                                              |                    |
|    |              | <b>A14.6.3</b> | <b>GENERAL</b>                                                                                                      |                    |
|    |              |                | <b>A14.6.3.1 Method Statements</b>                                                                                  |                    |
|    |              |                | <b>A14.6.3.2 Hold points and approvals</b>                                                                          |                    |
|    |              | <b>A14.6.4</b> | <b>DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS</b>                                                             |                    |
|    |              |                | <b>A14.6.4.1 General</b>                                                                                            |                    |
|    |              |                | <b>A14.6.4.2 Sprayed concrete</b>                                                                                   |                    |
|    |              | <b>A14.6.5</b> | <b>MATERIALS</b>                                                                                                    |                    |
|    |              |                | <b>A14.6.5.8 Reinforcement</b>                                                                                      |                    |
|    |              |                | <b>A14.6.5.9 Compressive strength, tensile splitting strength, flexural strength, or energy absorption capacity</b> |                    |
|    |              |                | <b>A14.6.5.10 Drainage and weepholes</b>                                                                            |                    |
|    |              | <b>A14.6.7</b> | <b>EXECUTION OF THE WORKS</b>                                                                                       |                    |
|    |              |                | <b>A14.6.7.1 Mix design</b>                                                                                         |                    |
|    |              |                | <b>A14.6.7.3 Preconstruction trial panels</b>                                                                       |                    |
|    |              |                | <b>A14.6.7.4 Surface preparation</b>                                                                                |                    |
|    |              |                | <b>b) Embedded reinforcement</b>                                                                                    |                    |
|    |              |                | <b>A14.6.7.5 Formwork</b>                                                                                           |                    |
|    |              |                | <b>A14.6.7.6 Fixing of reinforcement</b>                                                                            |                    |
|    |              |                | <b>A14.6.7.9 Surface finish</b>                                                                                     |                    |

| CH | SEC          | CL             | SUB-CLAUSE                                                             | SPECIFICATION DATA |
|----|--------------|----------------|------------------------------------------------------------------------|--------------------|
|    |              |                | <i>(iii) Trowelled finish (GT)</i>                                     |                    |
|    |              |                | <b>A14.6.7.11 Properties of hardened sprayed concrete</b>              |                    |
|    |              |                | <b>a) Compressive strength</b>                                         |                    |
|    |              |                | <b>A14.6.7.12 Construction joints</b>                                  |                    |
|    |              |                | <b>A14.6.7.13 Weepholes</b>                                            |                    |
|    |              | <b>A14.6.8</b> | <b>WORKMANSHIP</b>                                                     |                    |
|    |              |                | <b>A14.6.8.1 Tolerances</b>                                            |                    |
|    | <b>D14.6</b> |                | <b>SPRAYED CONCRETE FOR STRUCTURES</b>                                 |                    |
|    |              | <b>D14.6.3</b> | <b>PERFORMANCE GUARANTEE REQUIREMENTS</b>                              |                    |
|    |              |                | <b>D14.6.3.1 Performance specifications</b>                            |                    |
|    | <b>A14.7</b> |                | <b>PROTECTIVE COATINGS AND TREATMENTS FOR CONCRETE</b>                 |                    |
|    |              | <b>A14.7.7</b> | <b>EXECUTION OF THE WORKS</b>                                          |                    |
|    |              |                | <b>A14.7.7.4 Protective surface treatment</b>                          |                    |
|    | <b>A14.8</b> |                | <b>EXTERNAL BONDING OF STEEL AND CARBON FIBRE</b>                      |                    |
|    |              | <b>A14.8.7</b> | <b>EXECUTION OF THE WORKS</b>                                          |                    |
|    |              |                | <b>A14.8.7.3 Preparation of concrete surfaces</b>                      |                    |
|    |              |                | <b>c) Concrete surfaces for bonding reinforcement or rods in slots</b> |                    |
|    |              |                | <b>A14.8.7.12 Fixing and anchors</b>                                   |                    |
|    |              |                | <b>A14.8.7.15 Tolerances</b>                                           |                    |
|    | <b>D14.8</b> |                | <b>EXTERNAL BONDING OF STEEL AND CARBON FIBRE</b>                      |                    |
|    |              | <b>D14.8.3</b> | <b>PERFORMANCE GUARANTEE REQUIREMENTS</b>                              |                    |
|    |              |                | <b>D14.8.3.2 Performance specifications</b>                            |                    |
|    | <b>A14.9</b> |                | <b>REPAIR AND REPLACEMENT OF ANCILLARY STRUCTURAL ELEMENTS</b>         |                    |
|    |              | <b>A14.9.3</b> | <b>GENERAL</b>                                                         |                    |
|    |              | <b>A14.9.7</b> | <b>EXECUTION OF THE WORKS</b>                                          |                    |
|    |              |                | <b>A14.9.7.3 Repair of expansion joints</b>                            |                    |

| CH | SEC    | CL       | SUB-CLAUSE                                                    | SPECIFICATION DATA |
|----|--------|----------|---------------------------------------------------------------|--------------------|
|    |        |          | A14.9.7.4 Repair of handrails                                 |                    |
|    |        |          | b) Non-metallic handrails                                     |                    |
|    |        |          | A14.9.7.5 Removal and rebuilding of brickwork                 |                    |
|    |        |          | A14.9.7.8 Replacement and refurbishment of ancillary elements |                    |
|    | D14.9  |          | REPAIR AND REPLACEMENT OF ANCILLARY STRUCTURAL ELEMENTS       |                    |
|    | A14.10 |          | JACKING OF BRIDGE STRUCTURES                                  |                    |
|    |        | A14.10.6 | CONSTRUCTION EQUIPMENT                                        |                    |
|    |        |          | A14.10.6.1 Jacking Equipment                                  |                    |
|    |        |          | a) General requirements                                       |                    |
|    |        |          | b) Vertical alignment of members                              |                    |
|    |        | A14.10.7 | EXECUTION OF THE WORKS                                        |                    |
|    |        |          | A14.10.7.3 Jacking of continuous structures                   |                    |
|    |        |          | A14.10.7.5 Installation of permanent bearings                 |                    |
|    |        | A14.10.8 | WORKMANSHIP                                                   |                    |
|    |        |          | A14.10.8.1 Alignment, deflection and jacking control          |                    |
|    | D14.10 |          | JACKING OF BRIDGE STRUCTURES                                  |                    |
|    |        | D14.10.3 | PERFORMANCE GUARANTEE REQUIREMENTS                            |                    |
|    |        |          | D14.10.3.2 Performance specifications                         |                    |
|    | A14.11 |          | REPAIR OF STEEL ELEMENTS                                      |                    |
|    |        | A14.11.6 | CONSTRUCTION EQUIPMENT                                        |                    |
|    | D14.11 |          | REPAIR OF STEEL ELEMENTS                                      |                    |
|    |        | D14.11.3 | PERFORMANCE GUARANTEE REQUIREMENTS                            |                    |
|    |        |          | D14.11.3.2 Performance specifications                         |                    |

**COTO CHAPTER 20: QUALITY ASSURANCE**

| CH | SEC   | CL      | SUB-CLAUSE                                      | SPECIFICATION DATA                                           |
|----|-------|---------|-------------------------------------------------|--------------------------------------------------------------|
| 20 |       |         | QUALITY ASSURANCE                               |                                                              |
|    | A20.1 |         | TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP  |                                                              |
|    |       | A20.1.3 | TESTING METHODS                                 |                                                              |
|    |       |         | A20.1.3.3 The Costs of Testing                  |                                                              |
|    |       |         | a) Material and workmanship for quality control | Testing will be undertaken by an independent site laboratory |

## **PART C4: PROJECT INFORMATION**

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## **PART C4: PROJECT INFORMATION**

| <b>TABLE OF CONTENTS</b>                                                                 | <b>PAGE</b> |
|------------------------------------------------------------------------------------------|-------------|
| C4.1 DESCRIPTION OF THE WORKS.....                                                       | C3-96       |
| C4.2 DRAWINGS .....                                                                      | C3-97       |
| C4.3 CAMP ESTABLISHMENT, POWER SUPPLY AND OTHER SERVICES.....                            | C3-97       |
| C4.4 CONSTRUCTION IN CONFINED AREAS .....                                                | C3-97       |
| C4.5 MANAGEMENT OF THE ENVIRONMENT .....                                                 | C3-97       |
| C4.6 TRAFFIC.....                                                                        | C3-97       |
| C4.7 SMALL CONTRACTOR DEVELOPMENT, TRAINING AND COMMUNITY<br>LIAISON.....                | C3-98       |
| C4.8 CLIMATE .....                                                                       | C3-98       |
| C4.9 REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND<br>REGULATIONS 2014..... | C3-98       |
| C4.10 SAFETY PROCEDURES .....                                                            | C3-98       |
| C4.11 OTHER INFORMATION.....                                                             | C3-98       |
| C4.13 APPENDICES.....                                                                    | C3-98       |
| APPENDIX 1: LOCALITY PLAN .....                                                          | C3-99       |
| APPENDIX 2: WEATHER DATA.....                                                            | C3-100      |
| APPENDIX 3: TRAFFIC DATA .....                                                           | C3-101      |

### Information Only

All data and descriptions contained in this section of the contract documents are given for information purposes only and cannot be interpreted as prescriptive or as an instruction despite the fact that the text may give the opposite perspective. If any conflict arises between the content of this section and other sections of the contract documents, the latter take precedence.

#### C4.1 DESCRIPTION OF THE WORKS

The description of the works shall inter alia contain the following particulars regarding the work to be constructed and maintained under the contract.

##### C4.1.1 ROADWORKS

Project location and limits

Route numbers and lengths of all sections of each road, cross-road, connecting road and access road.

Where the sections of each road, cross-road, etc. start and end, and the nearest destinations

A single or dual-carriageway road, or one carriageway of a future dual-carriageway road

Type of surfacing

Particulars specific to the contract with regard, inter alia, to services which require protection or moving, deviations for the accommodation of traffic, half-width construction, etc.

Appurtenant works such as fencing, road signs, landscaping, etc.

The description of the works shall include reference to all the layout plans.

##### C4.1.2 PAVEMENT DESIGN FOR ALL PARTS OF THE VARIOUS ROADS

Existing pavement information and pavement design

Type of surfacing or reseal

Type of base

Type of upper subbase

Type of lower subbase

Type of upper selected layer

Type of lower selected layer

Type of wearing course (gravel roads)

##### C4.1.3 STRUCTURAL WORKS

###### (a) Culverts

*The number, kilometre distance, number of openings, width, height, length and angle of skew of each culvert.*

*The purpose of each culvert, viz. drainage, services, cattle creep, etc.*

###### (b) Bridges

*The bridge number, kilometre distance, type of bridge, number of spans, span length, bridge width, horizontal alignment, angle of skew, type of structure, foundation piles, and other characteristics of each bridge.*

###### (c) Other structures

*More information on work on other structures.*

###### (d) Rehabilitation of structures

*More information on rehabilitation work*

##### C4.1.4 MAINTENANCE WORKS

C4.2 DRAWINGS

The drawings that form part of the tender document are issued for tender purposes only.

The contractor will be supplied with one set of paper prints plus a CD containing all the construction documentation.

Only figured dimensions may be used and drawings may not be scaled unless so instructed by the engineer. The engineer will supply all figured dimensions omitted from the drawings.

The levels given on bridge drawings are subject to confirmation on site, and the contractor shall submit all levels to the engineer for confirmation before he commences any structural construction work. It is the contractor's responsibility to check all clearances given on the drawings and to inform the engineer of any discrepancies.

C4.3 CAMP ESTABLISHMENT, POWER SUPPLY AND OTHER SERVICES

The contractor is to make his own arrangements concerning the supply of electrical power and all other services. No direct payment will be made for the provision of electrical and other services. The cost thereof is deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

C4.4 CONSTRUCTION IN CONFINED AREAS

It will be necessary for the contractor to work within confined areas. In certain places the width of the fill material and pavement layers may decrease to zero and the working space may be confined. The method of construction in these confined areas largely depends on the contractor's constructional plant.

Regardless, measurement and payment will be in accordance with the specified cross-sections and dimensions only, irrespective of the method used for achieving these cross-sections and dimensions. It is deemed that the rates tendered in the Pricing Schedule include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions. No extra payment will be made nor will any claim for additional payment be considered in such cases. (Refer to standard specification sub-clause C1.1.3.2(b)).

C4.5 MANAGEMENT OF THE ENVIRONMENT

The contractor will be responsible for construction according to an environmental management plan in terms of Section C1000 Scope of Works.

The contractor must take the utmost care to minimise the impact of his establishment and other construction activities on the environment and must adhere to the requirements as set out in Section C of the Scope of Works. Where the contractor fails to adhere to these requirements the specifications in Section C of the Scope of Works provide the methodology and cost liability of remedy.

C4.6 TRAFFIC

*All relevant traffic information should be recorded so that the tenderer is afforded the opportunity to comprehend fully the circumstances that will be encountered on the site. If construction restrictions will be necessary then mention should be made of them here. Actual embargo times and dates are to be shown in C1.2.2 Appendix to Tender: Contract Data clause A8.3(l) and restricted working conditions in clause A8.3(m) and reference to this fact recorded here.*

#### C4.7 SMALL CONTRACTOR DEVELOPMENT, TRAINING AND COMMUNITY LIAISON

The South African National Roads Agency SOC Limited is committed to the implementation of Government's policies and in turn expects the same from its contractors. Accordingly, it is a requirement of this project that tenderers are familiar with the specifications that relate to the transformation of the construction industry through the following:

- (i) adherence to the policies of the Reconstruction and Development Programme and other similar Government initiatives,
- (ii) employment and/or creation of Targeted Enterprises,
- (iii) arrangement of generic skills, engineering skills and entrepreneurial skills training programmes for which provision has been made in the Pricing Schedule,
- (iv) construction using labour maximisation principles and,
- (v) active participation with community-based structures.

Tenderers should note that liaison with Community Stakeholders via active participation with the Project Liaison Committee, as well as employment of people from within the community, are essential parts of the project. A provisional sum to cover costs incurred by members of the community in the liaison process has also been included in the Pricing Schedule.

Section D of the Scope of Works covers the contractor's requirements in detail, as well as defining the targets that comprise the Contract Participation Goal (CPG).

#### C4.8 CLIMATE

*Include rainfall and temperature information*

#### C4.9 REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS 2014

Refer to Section E of the Scope of Works for general requirements in terms of the OH&S requirements.

#### C4.10 SAFETY PROCEDURES

Refer to Section E of the Scope of Works for general requirements in terms of the OH&S requirements.

#### C4.11 OTHER INFORMATION

Refer to Section E of the Scope of Works for general requirements in terms of the OH&S requirements.

#### C4.13 APPENDICES

- Appendix 1: Locality Plan
- Appendix 2: Weather Data
- Appendix 3: Traffic Data

## APPENDIX 1: LOCALITY PLAN

## APPENDIX 2: WEATHER DATA

## APPENDIX 3: TRAFFIC DATA

**FREE STATE PROVINCIAL GOVERNMENT**  
**DEPARTMENT OF POLICE, ROADS AND TRANSPORT**

**SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1  
BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

**CONTRACT NUMBER C109/2021**

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**Part C3.5. HIV/AIDS Requirements**

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## C3.5 HIV/AIDS Requirements

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The HIV/AIDS requirements are as per the HIV/AIDS Specification published by the Department of Public Works in October 2004 (PW 1544), obtainable from the following address

[http://www.publicworks.gov.za/PDFs/consultants\\_docs/HIV\\_AIDS\\_Specification.pdf](http://www.publicworks.gov.za/PDFs/consultants_docs/HIV_AIDS_Specification.pdf)

**FREE STATE PROVINCIAL GOVERNMENT**  
**DEPARTMENT OF POLICE, ROADS AND TRANSPORT**  
**SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND**  
**P6/1 BETWEEN WEPENER, DEWETSDORP AND**  
**BLOEMFONTEIN**

**CONTRACT NUMBER C109/2021**

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**Part C3.6. Guidelines for Subcontracting and Labour Enhancement**

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| <b>TABLE OF CONTENTS</b>                                 | <b>PAGE</b> |
|----------------------------------------------------------|-------------|
| C3.6.1: DEFINITIONS.....                                 | C3.3-268    |
| C3.6.2: COMMUNITY PARTICIPATION.....                     | C3.3-270    |
| C3.6.3: DEVELOPMENT AND SUPPORT OF ABE'S.....            | C3.3-271    |
| C3.6.4: DISPUTE AVOIDANCE AND RESOLUTION PROCEDURES..... | C3.3-277    |
| C3.6.5: CONTRACTOR'S LIABILITY.....                      | C3.3-277    |
| C3.6.6: CERTIFICATE OF EXPERIENCE.....                   | C3.3-278    |
| C3.6.7: LABOUR ENHANCED CONSTRUCTION.....                | C3.3-278    |
| C3.6.8: TEMPORARY WORKFORCE.....                         | C3.3-278    |
| C3.6.9: TRAINING THE TEMPORARY WORKFORCE.....            | C3.3-280    |
| C3.6.10: ACCREDITED TRAINING AND ATTENDANCE.....         | C3.3-280    |
| C3.6.11: PENALTIES FOR NON-COMPLIANCE.....               | C3.3-281    |
| C3.6.12: MEASUREMENT AND PAYMENT.....                    | C3.3-281    |

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Contractor      Witness 1      Witness 2      Employer      Witness 1      Witness 2

## C3.6 Guidelines for Subcontracting and Labour Enhancement

### C3.6.1 DEFINITIONS

**The community** means individual and communal property owners, organised groups of road users, other interest groups and departments or spheres of government that may be affected by the location, construction, operation and maintenance of the road to which this contract applies.

**"National Small Business Support Strategy"** means the national policy in respect of small business support as published by the Minister in the Gazette, and includes the policy as stated in the White Paper on National Strategy for the Development and Promotion of Small Business in South Africa.

**"Small business"** means a separate and distinct business entity, including co-operative enterprises and non-governmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub-sector of the economy mentioned in column 1 of the Schedule below and which can be classified as a micro-, a very small, a small or a medium enterprise by satisfying the criteria mentioned in columns 3, 4 and 5 of the Schedule opposite the smallest relevant size or class as mentioned in column 2 of the Schedule.

#### SCHEDULE OF SMME CLASSIFICATIONS

| Sector       | Size of class | Total full-time equivalent of paid employees ; less than | Total annual turnover : less than | Total gross asset value (fixed property excluded): less than |
|--------------|---------------|----------------------------------------------------------|-----------------------------------|--------------------------------------------------------------|
| Construction | Medium        | 200                                                      | R26.00m                           | R4.00m                                                       |
|              | Small         | 50                                                       | R6.00m                            | R1.00m                                                       |
|              | Very small    | 20                                                       | R2.00m                            | R0.40m                                                       |
|              | Micro         | 5                                                        | R0.15m                            | R0.10m                                                       |

**"Conventional contract"** means any contract for the execution of civil Engineering or building or similar construction works, in which the liabilities and responsibilities of the two parties thereto are assigned essentially in a manner which is consistent with that set out in the General Conditions of Contract for Road and Bridge Works for State Road Authorities, 1998 (as published by the Committee of Land Transport Officials) or other similar documents.

**"Conventional subcontract"** shall be similarly and appropriately construed.

**"Contract Participation Goal"** (or CPG), is the value of goods, services and works, excluding VAT, for which the Contractor proposes to engage labour and sub-Contractors.

**"Contractor"** means any person or group of persons in association, or firm, or body corporate who is registered with the Construction Industry Development Board (CIDB) and:

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- a) have a Contractor grading designation equal to or higher than a Contractor grading designation specified for the Contract, or
- b) Contractors registered as potentially emerging enterprises with the CIDB who are registered in one Contractor grading designation lower than that required in terms of a) above

**"Sub-Contractor"** shall be similarly and appropriately construed.

**Emerging Contractor** means an ABE that can not reasonably be categorised as a conventional Contractor defined above.

**Affirmable Business Enterprise (ABE):** a business which adheres to statutory labour practices, is a legal entity, registered with the South African Revenue Service and a continuing and Independent Enterprise for profit, providing a Commercially Useful Function and:

- a) Which is at least two thirds owned by one or more previously disadvantaged individuals or, in the case of a company, at least two thirds of the shares are owned by one or more previously disadvantaged individual; and
- b) Whose management and daily business operations are in the control of one or more of the previously disadvantaged individuals who effectively own it: provided, however, that the total annual average turnover, excluding value added tax and any turnover generated in respect of work performed by other parties in a joint venture or a consortium, of the business during the lesser of the period for which the business has been operating and the previous three financial years does not exceed:-
  - i) R25 million in respect of Contractors who generate more than 75% of their turnover as Prime Contractors.
  - ii) R10 million in respect of Contractors who generate less than 25% of their turnover as Prime Contractors.
  - iii) R2,5 million in respect of labour-only sub-Contractors
  - iv) R10 million in respect of Manufacturers
  - v) R15 million in respect of Suppliers
  - vi) R2,5 million, exclusive of any turnover generated in respect of out sourced activities which the enterprise does not have the in-house competence and expertise to perform, in respect of professional service providers, and
  - vii) R2,5 million in respect of other service providers, e.g. transporters, and that the sum of the average annual turnover for the same period of all the business concerns which are under the Control of Previously Disadvantage Individuals within the business entity and Affiliated Entities does not exceed one and a half (1,5) times the maximum allowable annual average turnover for the particular category of enterprise as set out in the schedule above, seeking ABE status.

**"Key Personnel"** means all contracts managers, site agents, materials and survey technicians, trainers, supervisors, foremen, skilled plant operators, and all other personnel in the permanent employ of the Contractor or his sub-Contractor who possess special skills and/or who play key roles in the Contractor's or sub-Contractor's operations.

**"Worker"** for the purposes of this specification means any person, not being one of the defined key personnel of the Contractor or his sub-Contractor, who is engaged by the Contractor or sub-Contractor to participate in the execution

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

of any part of the contract works and shall include unskilled labour, semi-skilled and skilled labour, artisans, clerical workers and the like.

**“Workforce”** means the aggregate body comprising all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all his sub-Contractors.

**“Sub-Contractor”** means any person or group of persons in association, or firm, or body corporate (whether formally constituted or otherwise) not being the Contractor, to whom specific portions or aspects of the works are sublet or subcontracted by the Contractor in accordance with the provisions of the contract.

**Level of sub-Contractor** means the level of responsibility carried by and the assistance to be provided to the different grades of sub-contractor in the execution of subcontracts.

**“PLC”** is the Project Liaison Committee

**“Project Committee”** is the committee comprising out of the Employer’s representative, The Engineer or his representative, the Contractor or his representative and the CLO.

**“CLO”** is the Community Liaison Officer as appointed by the Contractor and paid under the Contract.

## C3.6.2

### COMMUNITY PARTICIPATION

#### a) Purpose

In order to give effect to the need for participation and transparency in the process of appointing labour, the community should participate in the decision making process throughout the life of a project. This shall be achieved through structured engagement between those responsible for the delivery of the project and the community.

#### b) Structure and Composition

A Project Liaison Committee (PLC) may be formed from representatives of the Employer, the Engineer, the Contractor and the Community if the project is such that a specific community can be identified.

#### c) Procedures

- i) The PLC deals with labour and ABE involvement on the project and shall meet at least once every month until such time as it is of the opinion that it could fulfil its tasks by meeting less frequently.
- ii) The PLC shall make recommendations by consensus. If consensus cannot be reached, the decision of the Employer will be final in cases that have no financial implications for the Contractor or where payment is to be made from PC items. Where the financial responsibility for the successful completion of the works rests with the Contractor, the Contractor’s decision shall be final. In fulfilling its tasks, the PLC shall be guided by the relevant sections of this specification and the supplementary documents.

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| Contractor | Witness 1 | Witness 2 | Employer | Witness 1 | Witness 2 |

d) **Tasks of the PLC**

- i) To assist with community liaison and resolution of disputes.
- ii) To devise fair and transparent procedures that will assist the Contractor in the engagement of labour and the award of sub-contracts to ABE's.
- iii) To advise on and monitor labour issues.
- iv) To assist in resolving labour disputes.

e) **Assistance to the PLC**

- i) The Employer may appoint a competent local person as a Community Liaison Officer to assist the Engineer and the Contractor in the day to day liaison with the communities directly affected by the project.

**C3.6.3**

**USE, DEVELOPMENT AND SUPPORT OF ABE'S WITHOUT CIDB REGISTRATION**

a) **Extent of the works to be executed by ABE's.**

A major objective of the RDP is to extend economic opportunities and entrepreneurial capacity to all localities by the optimum utilisation of the resources existing in the vicinity of projects, the development of these resources in the execution of the project, and by maximising the amount of project funds retained within the project locality.

The Engineer shall advise the Free State Provincial Government: Department of Public Works, Roads and Transport on the contract participation goal (CPG) for local ABE's that may be achieved on the project. This CPG will be stated in the Contract Data.

Only ABE's that have been appointed through the procedures adopted by the PLC shall count towards the achievement of the target, unless the PLC agrees that ABE's that have been engaged by the Contractor as a result of contractual arrangements between the Contractor and such ABE's prior to tendering, or before the adoption of the agreed procedures, can qualify.

Where all tenderers have been supplied with a list of pre-qualified ABE's, these ABE's can be engaged by the Contractor prior to award and will be counted towards the achievement of the CPG.

Upon receipt of a fully motivated written application from the Contractor, the target may be reduced. The circumstances for such a reduction may include inter alia the following:

- non-receipt of valid tenders from ABE's;
- default or failure of appointed ABE's to complete sub-contracts;

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- but shall not include the failure of the PLC to approve ABE's referred to above.

**b) Terms and conditions of the subcontract agreements**

The terms and conditions of each subcontract agreement shall be as mutually agreed between the Contractor and the ABE's.

Each subcontract agreement shall contain terms and conditions which assign the responsibilities and liabilities of the two parties to the subcontract.

The terms and conditions of the subcontract agreement shall further be such as to specifically ensure that the provisions of this contract pertaining to:

- the allowable sources from which workers may be drawn;
- the terms and conditions relating to the recruitment and employment of the workers
- any training to be provided to the temporary workforce;

shall apply in respect of all workers engaged and employed by any ABE.

Except where it is in conflict with the responsibilities of the sub-Contractor under a particular level of subcontract, the terms and conditions of the subcontract agreement shall:

- include an entitlement of the sub-Contractor to receive such training and support as is contemplated in this contract; and
- an obligation on the ABE to participate and co-operate in such training as is provided for in this contract.

The Contractor shall be responsible for the compilation of each subcontract agreement and for ensuring that terms and conditions thereof are consistent with all requirements as specified in, or reasonably to be inferred from, the provisions of this contract. The Contractor shall bear all costs associated with the compilation of the subcontract documentation and the conclusion of the agreement.

In addition to the provisions of General Conditions of Contract, the final terms and conditions of each subcontract agreement shall be subject to the approval of the Engineer, which approval shall be obtained by the Contractor prior to entering into the subcontract agreement and which approval shall not be unreasonably withheld.

The Contractor shall include a condition of subcontract that ABE sub-Contractors shall apply for accreditation through the CEITS Accreditation Programme or other similar approved programme, for small/emerging Contractors.

**c) Formulation of subcontracts**

**i) Scope, extent and level of subcontracts**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The Contractor shall submit a list of subcontracts that he proposes to let to the PC setting out:

- the scope and extent of the works to be included in any particular subcontract;
- the time at which subcontracts will be let; and
- the duration of the subcontract;

The scope and extent of the proposed subcontracts shall be framed in such a manner as will facilitate the achievement of all objectives and principles pertaining to ABE's use and development as are stated in or as may reasonably be inferred from the conditions of this contract, due cognisance being taken of:

- the prevailing levels, ability, resources and previous experience of the potential candidates available;
- the training and assistance to be provided to the ABE's in terms of this contract;
- the period allowed in the Appendix for completion of the Works and the approved programme of works;
- the scope of the Works described in the Project Specifications; and all constraints and conditions contained in this contract, as may impact upon the subcontract.

The level to be applicable to any particular subcontract shall be selected by the Contractor, in accordance with the following criteria:

- the level of subcontract shall be commensurate with the scope and extent of Works included in the subcontract; and
- the level of subcontract shall be selected taking due cognisance of:
  - the prevailing levels of the available candidates;
  - the assistance to be provided by the Contractor to the ABE's for any given level of subcontract;
  - the training and support to be provided to the ABE's in terms of the contract;
  - the training as may have previously been provided to candidate ABE's under this or other contracts.

The Contractor shall formulate the subcontracts in a manner that will facilitate optimum use of available potential ABE's.

**d) Engagement of sub-Contractors**

The Contractor shall submit a program and procedures that will show the optimum use of ABE's on the contract along the following guidelines.

**i) Identification and general training of potential ABE's**

The Contractor will, through an appropriate public information campaign in the vicinity of the project, invite potential sub-

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Contractors to attend information sessions about the scope of the works, the RDP objectives of the Project and the scope of the Works that could be undertaken by ABE's.

Potential ABE's shall be invited to attend training workshops that could include the following modules:

- Estimating and Tendering
- Conditions of Contract & Specification
- Basic Business Appreciation
- Statutory obligations pertaining to the requirements and procedures of inter alia:
  - Site tax/income tax deductions from the amounts due to their employees;
  - The occupational Health and Safety Act 1993; (Act No 85 of 1993);
  - Value-added tax (VAT) and other taxes for which the small sub-Contractor may be liable;
  - His status as an employer.

The training shall be conducted by an accredited training agency and the candidates who successfully complete the training shall receive certificates and their names retained on a list of potential tenderers.

ii) Advertisement

The Contractor shall compile an advertisement setting out the scope and type of work that will be let out to sub-Contractors and inviting interested parties to obtain tender qualification forms. **The compiled advertisement should be submitted to the Employer for approval before placing the advertisement.** The tender qualification form shall elicit information from prospective tenderers that will assist the Contractor in determining the eligibility of the applicant to perform at a particular level of subcontract. This advertisement shall be run in appropriate daily newspapers if available and displayed at public buildings, shops and other places in the vicinity of the project and disseminated through various community structures.

Notwithstanding the above requirements to advertise publicly for invitations to qualify for tenders, the Contractor may invite specific eligible ABE's as he may select.

The PC shall scrutinize the applications in terms of previous experience, equipment, labour force, financial position and location, but without identification, and allocate them to the type of work that they could potentially undertake, having regard also for further training and support.

If after the initial allocation, there should be an excessive number of candidates, a further selection shall be made to reduce the number of potential tenderers per subcontract to no more than five.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

iii) Invitation and site inspection

Applicants who satisfy the pre-qualification process shall be invited to attend a site inspection, conducted jointly by the Engineer and the Contractor at which the tender documents shall be handed over and the exact scope and requirement of each sub-contract explained.

iv) Adjudication and award

Upon receipt of the tenders, the Contractor shall adjudicate the tenders and make proposed awards, based on criteria such as balance of rates, overall tender price against realistic cost to deliver in time and at a reasonable margin of profit.

The proposed awards shall then be submitted to the PC for ratification. The PC shall have the right to interview any tenderer for the purpose of:

- clarifying any aspect of the tender;
- verifying the eligibility of the tenderer by further enquiry into aspects that may not be clear from the pre-qualification; and
- making alternative proposals in the event that it is considered a better selection as is available to the Contractor.

Notwithstanding the above, since the responsibility for due performance vests with the Contractor, the Contractor's decision is final should agreement with the PC not be reached as to the preferred candidate.

e) **Training, Mentoring, Guidance and Assistance**

i) Structured training and support

The PLC may assist in identification of the contract workers to undergo training as specified in the training programme specifications in paragraph 9 of this section.

The PLC may assist with formalising a structured development programme for ABE sub-Contractors, having regard for the resources and experience of the ABE's that have been engaged and the scope and level of the subcontracts, in accordance with the criteria set out below.

ii) Co-operative Venture

ABE Contractors who have been identified in the pre-qualification stage and who have some experience and equipment, but who operate independently with little training and backup, should be brought together with a view to forming a co-operative venture to allow them to access work requiring varied skills and equipment and of a larger magnitude.

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| Contractor | Witness 1 | Witness 2 | Employer | Witness 1 | Witness 2 |

iii) ABE support office

Such an office shall be part of the Contractor's own site establishment and shall provide administrative and technical services exclusively to ABE's that have been selected according to the processes defined in these project specifications. The following support shall be provided:

- Materials ordering
- Invoicing
- Wage packaging
- Cost control
- Work scheduling
- Setting out of work
- Measurement of work done
- Training

Such an office shall be staffed in joint venture between the Contractor, who shall be paid an amount under the contract for ABE support, the Employer via the training allowed for in the contract, and the ABE's who shall pay a service fee.

iv) Financial Assistance to ABE's

The Contractor shall tender to assist ABE's with:

- Funding of wages between payment certificates at the start of the contract
- Payment for materials channelled through their accounts
- Guarantees for financing of equipment

v) Supply of services and materials

As part of the pre-tender communication strategy, local business and local community structures should be informed of the needs so that they can prepare themselves to take advantage of the opportunities to provide goods and services.

Cartage only subcontracts could be advertised as ABE work and included in the statistics if the proper procedures are followed.

The supply only of material as well as the supply of labour through labour brokers who will work under the supervision of the Contractor, shall not count towards the target of work done by ABE's.

vi) Accredited training

Over and above the in-task training provided to the workforce, training by accredited training providers shall be provided to ABE's as enterprises with the aim of progressing through the levels as defined. The Contractor shall assist in facilitating in the delivery of the training, by instructing and motivating the ABE's regarding attendance and participation therein. The Contractor shall further

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ContractorWitness 1Witness 2EmployerWitness 1Witness 2

make all reasonable efforts to co-ordinate the programming of the ABE's work with that of the delivery of the structured training.

#### **C3.6.4**

#### **DISPUTE AVOIDANCE AND RESOLUTION PROCEDURES**

The Contractor shall at all times apply the terms and conditions of the subcontract fairly and justly, taking due cognizance of the level of sophistication and experience of the particular ABE's concerned, as well as the level of subcontract applicable.

The Contractor shall closely monitor and supervise all ABE's and wherever feasible, shall give reasonable warning to the ABE's when any contravention of the terms of the subcontract has occurred or appears likely to occur.

The Contractor shall, whenever feasible, give the ABE's reasonable opportunity to make good any such contravention, or to avoid such contravention and shall render all reasonable assistance to the ABE's in this regard.

When taking any disciplinary actions or imposing any penalties as are provided for in the subcontract, the Contractor shall explain fully to the ABE's that such actions are provided for in the subcontract.

If any dispute should arise between the Contractor and a ABE's, such dispute shall be resolved in accordance with the provisions of the subcontract. Notwithstanding, either party may at any time, refer any dispute to the Project Liaison Committee, the PC or the Engineer for consideration, with a view to facilitating the resolution thereof.

No opinion expressed by, or resolution or decision of the Project Liaison Committee, pertaining to any matter referred to it shall be binding on either party to the subcontract unless:

- it is stated in the subcontract agreement that the Contractor shall be bound by such opinions, resolutions or decisions; or
- the Contractor is instructed in writing by the Engineer to give effect thereto, in which case such instruction of the Engineer may be deemed to constitute an "instruction" as contemplated in the General Conditions of Contract.

#### **C3.6.5**

#### **CONTRACTOR'S LIABILITY**

No provision or requirement set out in this specification shall be deemed to relieve the Contractor of any liability or obligation under the contract, and in accordance with the provisions of subclause 8(4) of the conditions of contract, the Contractor shall be fully liable for the acts, defaults and neglects of any ABE's, his agents or employees, as fully as if they were the acts, defaults and neglects of the Contractor, his agents or employees.

Nothing contained in this specification shall be deemed to constitute or imply any warranty given by the Contractor to any party, that any ABE's to whom a subcontract is awarded in accordance with the provisions of this specification:

- can or will actually achieve the successful execution and completion of the subcontract; nor

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- will not suffer losses or damages as a result of the acceptance of his tender/quotation.

### C3.6.6

#### CERTIFICATE OF EXPERIENCE

The Contractor shall on the completion of each and every subcontract completed in accordance with the provisions of this specification, issue free of charge to the small, medium and micro enterprise a certificate stating:

a) **Contract data:**

- Contract title;
- Contractor's full name and address;
- Engineer's name and address;
- Employer's name;

b) **Subcontract data:**

- ABE's name and address;
- Scope or extent of the subcontract works;
- Value of the subcontract works;
- Applicable level of the subcontract;
- Duration of the subcontract;
- Date of completion of the subcontract;
- Description of the training undergone by the ABE's and certifying the ABE's completion of the subcontract.

The format, layout and appearance of certificates shall be at the Contractor's discretion, provided always that they shall be respectable and presentable in accordance with the general standards of normal business practice. All certificates shall be signed by the Engineer and a senior representative of the Contractor, who has been duly authorised thereto.

### C3.6.7

#### LABOUR ENHANCED CONSTRUCTION

The Contractor's attention is drawn to the fact that it is an objective of the contract to maximise the labour content of certain operations or portions thereof. In this regard, where the specified work allows for a choice between mechanical or labour-enhanced means, the former shall generally be kept to the practical minimum.

The Contractor shall submit on a monthly basis, daily labour returns to the Engineer indicating the numbers of temporary personnel employed on the works and the activities on which they were engaged.

### C3.6.8

#### TEMPORARY WORKFORCE

a) **Record of workforce**

The Contractor shall maintain accurate and comprehensive records of all workers engaged on the contract and shall provide to the Engineer at monthly intervals from the commencement of the contract, interim records substantiating the actual numbers of employment opportunities

  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

which have been generated to date and the amounts actually paid in respect thereof. Such interim records shall be in a format approved by the Engineer.

The Contractor shall, on completion of the contract, and as a pre-requisite to the release of any retention money, provide the Engineer with independently audited documentary evidence of the total number of employment opportunities actually generated during the contract.

The value of the target amount (minimum Contract Participation Goal) spent on local labour is prescribed in the Part C1.2.2: Contract Data.

b) **Recruitment and selection procedures**

The Contractor shall be responsible for the final selection of workers to constitute the temporary workforce but in doing so, shall adhere to the procedures adopted by the PLC or CLO along the following guidelines:

The Contractor shall advise the Engineer in writing, of the numbers of each category of temporary worker which he requires, together with the personal attributes which he considers desirable that each category of worker shall possess (taking due cognisance of the provisions of the contract relating to training).

The PLC or CLO shall take the necessary actions to identify potential workers for the temporary workforce from communities in the vicinity of the works. The details of all persons applying for employment shall be recorded, including inter-alia:

- Name, address, age and sex
- Marital status and number of dependants
- Qualifications and previous work experience (whether substantiated or not)
- Period since last economically active
- Preference for type of work or task.

The PLC or CLO shall make a selection of workers from amongst the applicants, taking due cognisance of his requirements for the workforce as supplied by the Contractor and the provisions of the contract in regard to the provision of training to selected members of the workforce and in accordance with the following principles:

No potential temporary worker shall be precluded from selection by virtue of a lack of skill in any suitable operation forming part of the works, unless:

- all available vacancies have been or can be filled by temporary workers who already possess suitable skills; or
- the completion period allowed in the contract, or the remaining portion of the contract period (as the case may be) is insufficient to facilitate the creation of the necessary skills;

The Contractor shall make a final selection from the list provided by the PLC or CLO using the following criteria:

- preference shall be given to the long term unemployed and single heads of households

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| Contractor | Witness 1 | Witness 2 | Employer | Witness 1 | Witness 2 |

- in so far as is reasonably practicable, give priority to accommodating the applicants' expressed preferences regarding the types of work for which they are selected and shall not be prejudicial to youth over the age of fifteen years and women.

The same provisions shall apply as is in respect of the selection of additional or replacement members of the workforce as may be necessary from time to time during the contract.

c) **Terms and Conditions Pertaining to the Employment of the Temporary Workforce**

The onus shall be on the Contractor to ensure that all the requirements of all the acts relating to the employment of workers are observed.

d) **Labour Relations and Worker Grievance Procedures**

In accordance with the provisions of the General Conditions of Contract, the Contractor shall, at his own cost, be fully responsible for the establishment and maintenance of satisfactory labour relations on site and the resolution of all grievances of temporary workers as may occur.

The Contractor shall at all times adhere to the accepted norms and standards of labour relations prevailing generally in the civil Engineering construction industry and shall conduct himself in a fair and reasonable manner, within the constraints as may be imposed upon him by the terms of the contract.

In the event of any temporary worker engaged by the Contractor in terms of the contract, being aggrieved on any issue, he shall have the right to nominate and be supported in any inquiry or disciplinary hearing or investigation instituted by the Contractor, by one member of the temporary workforce.

In the event of any grievance not being satisfactorily resolved through the application of normal dispute resolution procedures described above, then either the Contractor or the worker concerned may require that the matter be referred to the PC for further consideration, with a view to facilitating resolution thereof.

**C3.6.9**

**TRAINING OF THE TEMPORARY WORKFORCE**

Selected members of the workforce are to be provided at least with structured training by a nominated sub-Contractor, in accordance with the provisions of this section. The Contractor shall make all necessary allowances in his program of work to accommodate and facilitate the delivery of such structured training.

ABE sub-Contractors workforces will be entitled to receive accredited training that will improve on task skills necessary for the execution and successful completion of the various subcontracts. The Contractor, in conjunction with the Engineer, shall monitor each ABE's progress closely and shall identify those who will benefit from structured construction skills training

The technical training shall comprise of items selected from the table in paragraph 7 of this section and which are relevant to this project.

**C3.6.10**

**ACCREDITED TRAINING AND ATTENDANCE**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



(iv) HIV/AIDS.....percentage (%)

The provisional sums under items (a) to (e) provided shall cover all the cost of the training as described in this Section of the Particular Specifications

The tendered percentage under item (f) are percentages of the amounts actually spent under the items (a) to (e), which shall include full compensation for the handling costs of the Contractor, and the profit.

**ITEM**

**UNIT**

**C3.6.02 Remuneration of the project liaison**

(a) Project liaison officer .....PC Sum

(b) Project liaison committee .....PC Sum

(c) Contractor's profit and all other charges .....percentage (%)

The provisional sum provided shall cover the salary of the duly elected and approved CLO and the payments made by the Contractor to duly elected and approved community members for attending official PLC meetings respectively under (a) and (b).

The tendered percentage under item (c) is a percentage of the amounts actually spent under the items (a) and (b), which shall include full compensation for the handling costs of the Contractor.

**ITEM**

**UNIT**

**C3.6.03 Provision and maintenance of the ABE support office..... month**

The rate per month tendered shall include full compensation for providing and maintaining the ABE support office, as described in Section G1003 of the Particular Specifications. Any service fees paid by the ABE's to the Contractor towards the maintenance of this support office, shall be subtracted from the payments made to the Contractor."

**ITEM**

**UNIT**

**C3.6.04 Penalties**

a) Contract participation goals for subcontracting to Affirmable Business Enterprises (ABE) / Targeted Enterprises (CIDB 1CE PE – CIDB 4CE PE) ..... percentage point

b) Targeted Labour ..... percentage point

The **penalty** for item (a) for not meeting the minimum CPG (refer to Part T2: Returnable Documents) shall be as follows:

In the event that the Tenderer fails to substantiate that any failure to achieve the Contract Participation Goal was due to quantitative under runs, the elimination of items, or any

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Witness 2

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Employer

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Witness 1

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Witness 2

other reason beyond the Contractor's control which may be acceptable to the Employer, it shall be liable to pay to the Employer a financial penalty calculated in the following manner:

$$P = \frac{0.5 \times (D - D_o) \times N_A}{(100)}$$

where

D = tendered Contract Participation Goal percentage  
 D<sub>o</sub> = the Contract Participation Goal which the Employer's representative based on the credits passed, certifies as being achieved upon completion of the Contract  
 N<sub>A</sub> = Net Amount  
 P = Rand value of penalty payable.

THE minimum set-aside on this for contract for subcontracting to Affirmable Business Enterprise (ABE) / Targeted Enterprise (CIDB 1CE PE – CIDB 4CE PE) is 30%

The penalty for item (b) for not attaining at least the tendered number of person-days (refer to Part T2: Returnable Documents) will be calculated as follows:

In the event that the Tenderer fails to substantiate that any failure to achieve the Contract Participation Goal was due to quantitative under runs, the elimination of items, or any other reason beyond the Contractor's control which may be acceptable to the Employer, it shall be liable to pay to the Employer a financial penalty calculated in the following manner:

$$P = \frac{1.0 \times (D - D_o) \times N_A}{(100)}$$

where

D = tendered Contract Participation Goal percentage  
 D<sub>o</sub> = the Contract Participation Goal which the Employer's representative based on the credits passed, certifies as being achieved upon completion of the Contract  
 N<sub>A</sub> = Net Amount  
 P = Rand value of penalty payable.

The Minimum set-aside on this contract for Targeted Labour is 4 employees for every R1million spent.

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 Contractor

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 Witness 1

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 Witness 2

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 Employer

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 Witness 1

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 Witness 2

**FREE STATE PROVINCIAL GOVERNMENT**  
**DEPARTMENT OF POLICE, ROADS AND TRANSPORT**

**SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1  
BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

**CONTRACT NUMBER C109/2021**

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**Part C4. Site Information**

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|-------------|------------------------|----------------------|
| <b>C4.1</b> | <b>Location Maps</b>   | <b>Page C4.1-285</b> |
| <b>C4.2</b> | <b>Tender Drawings</b> | <b>Page C4.2-287</b> |

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**FREE STATE PROVINCIAL GOVERNMENT**  
**DEPARTMENT OF POLICE, ROADS AND TRANSPORT**

**SPECIAL MAINTENANCE OF PRIMARY ROAD P6/2 AND P6/1  
BETWEEN WEPENER, DEWETSDORP AND BLOEMFONTEIN**

**CONTRACT NUMBER C109/2021**

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**Part C4.1 Location Maps**

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Maps indicating the surface roads in Table C3.1.4.1 are attached at:

- Annexure A: Location Map of Wepener – Dewetsdorp – Bloemfontein
- Annexure B: Drawings

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Contractor

Witness 1

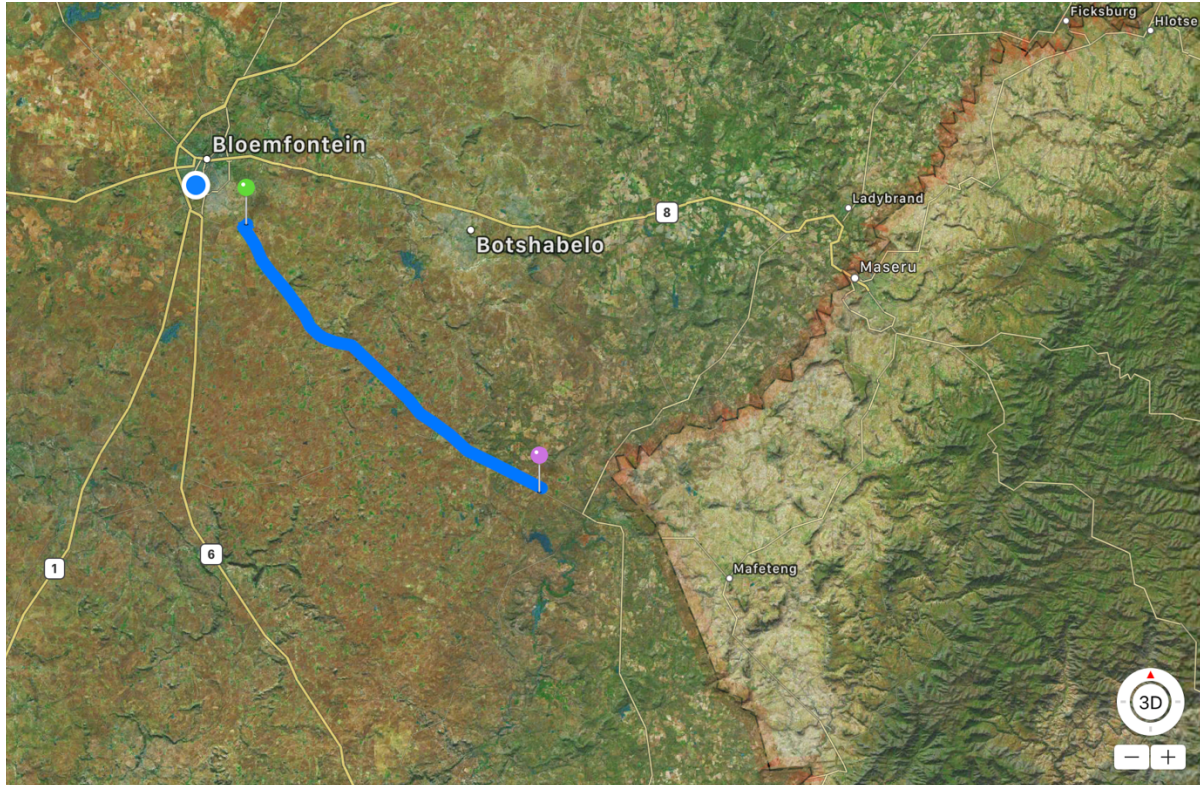
Witness 2

Employer

Witness 1

Witness 2

## ANNEXURE A



**ANNEXURE B**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2