police, roads and transport
Department of
Police, Roads and Transport
FREE STATE PROVINCE

PR&T/BID No. 11/2022/23

SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS

CIDB LEVEL REQUIRED: CIDB 9CE OR 8CEPE

Name of Tenderer: ……..…….

Bid Amount: ……

This tender closes at 11h00 on 31 January 2023, at the SCM offices of the Department of Police, Roads and Transport at 45 Charlotte Maxeke Street, Bloemfontein, 9300

LATE SUBMISSIONS WILL NOT BE CONSIDERED

Issued by:	**Prepared by:**
The Department of Police, Roads and Transport	**The Department of Police, Roads and Transport**
45 Charlotte Maxeke Street	St Andrew Street
Perm building	Medfontein building
Bloemfontein	Bloemfontein
3201	3201
Contact Name: SCM Offices	Contact Name: Roads Technical
Telephone: (051) 409 8891 or (051) 409 8899	Telephone: (051) 409 8575

S'HAMBA SONKE

EXPANDED PUBLIC WORKS PROGRAMME

SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS

CONTENTS

SECTION	DESCRIPTION	PAGE	COLOUR
	FOREWORD	(ii)	White
	THE TENDER		
PART T1	**TENDERING PROCEDURES**	**T1-2**	
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
PART T2	**RETURNABLE DOCUMENTS**	**T2-1**	
T2.1	LIST OF RETURNABLE DOCUMENTS	T2-2	Yellow
T2.2	RETURNABLE SCHEDULES	T2-3	Yellow
T2.2.1	RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES	T2-3	Yellow
T2.2.2	PREFERENTIAL PROCUREMENT SCHEDULES AND AFFIDAVIT	T2-33	Yellow
T2.2.3	PRO-FORMS TO BE SUBMITTED BY SUCCESSFUL TENDERER	T2-34	Yellow
	THE CONTRACT		
PART C1	**AGREEMENT AND CONTRACT DATA**	**C1-1**	
C1.1	FORM OF OFFER AND ACCEPTANCE	C1-3	Yellow
C1.2	CONTRACT DATA	C1-7	Yellow
PART C2	**PRICING DATA**	**C2-1**	
C2.1	PRICING INSTRUCTIONS	C2-2	Yellow
C2.2	BILL OF QUANTITIES	C2-5	Yellow
PART C3	**SCOPE OF WORK**	**C3-1**	

C3.1	STANDARD SPECIFICATIONS	C3-3	Blue
C3.2	PROJECT SPECIFICATIONS	C3-4	Blue
C3.3	PARTICULAR SPECIFICATIONS	C3-76	Blue
PART C4	**SITE INFORMATION**	**C4-1**	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 P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS

THE TENDER

PART T1: TENDERING PROCEDURES

PART T1: TENDERING PROCEDURES

CONTENTS

SECTION	**DESCRIPTION**	**PAGE**
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 **SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS**

PR&T/BID No. 11/2022/23

T1.1.2 Tenderers should have a **CIDB** Contractor grading designation of **9CE OR 8 CEPE**.

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:

Ms W. Makutoane
Tel no. 051 409 8899
E-mail: MakutoaneW@freetrans.gov.za

Mr T Sekwena
Tel no. 051 409 8891
E-mail: SekwenaT@freetrans.gov.za

T1.1.6 A compulsory clarification meeting with representatives of the Employer will take place at the Regional Roads Office in **Hamilton Office 26 Hartley Street Bloemfontein on the 20 January 2023 at 14:00**

T1.1.7 The closing time, date and venue for receipt of tenders will be **11h00 on 31st JANUARY 2023** at the Ground Floor of Perm Building, 45 Charlotte Maxeke, 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.

1. PART A
2. INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (*FREE STATE DEPARTMENT OF POLICE, ROADS AND TRANSPORT*)					
BID NUMBER:	**PR&T/BID No. 10/2022/23**	CLOSING DATE:	**31 January 2023**	CLOSING TIME:	**11:00**
DESCRIPTION	**SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN**				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT *(STREET ADDRESS)*					
45 Charlotte Maxeke Stree					
Bloemfontein					
9300					

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO		**TECHNICAL ENQUIRIES MAY BE DIRECTED TO:**	
CONTACT PERSON	Ms. W Makutoane & Mr. T sekwena	CONTACT PERSON	Mr.Sidwell Ndaba
TELEPHONE NUMBER	051 409 8899 & 051 8891	TELEPHONE NUMBER	082 5253 072
FACSIMILE NUMBER		FACSIMILE NUMBER	
E-MAIL ADDRESS	MakutoaneW@freetrans.gov.za SekwenaT@freetrans.gov.za	E-MAIL ADDRESS	ndabaroads@gmail.com

SUPPLIER INFORMATION						
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:		**OR**	CENTRAL SUPPLIER DATABASE No:	MAAA	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] ☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX] ☐ Yes ☐ No	

[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]			
ARE YOU THE ACCREDITED EPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐Yes ☐No [IF YES ENCLOSE PROOF]	2.2 ARE YOU A FOREIGN BASED SUPPLIER FOR **THE GOODS /SERVICES /WORKS OFFERED?**	☐Yes ☐No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS			

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? ☐ YES ☐ NO DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO **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.**

3. PART B
4. TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
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.
2. TAX COMPLIANCE REQUIREMENTS
2.3 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.4 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.
2.5 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.6 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.7 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.8 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.9 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: ……...

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.

Clause number	Wording
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.

F2.10.2 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, unless stated otherwise in the Tender Data.

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 calendar 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 who's 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) Detrimentally 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:

Method 1 : Financial offer **(N/A)**	1)	Rank tender offers from the most favourable to the least favourable comparative offer.
	2)	Recommend highest ranked Tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 2 : Financial offer and preferences **(N/A)**	1)	Score tender evaluation points for financial offer.
	2)	Confirm that Tenderers are eligible for the preferences claimed and if so, score tender evaluation points for preferencing.
	3)	Calculate total tender evaluation points.
	4)	Rank tender offers from the highest number of tender evaluation points to the lowest.
	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.
Method 3 : Financial offer and quality **(N/A)**	1)	Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender Data.
	2)	Score tender evaluation points for financial offer.
	3)	Calculate total tender evaluation points.
	4)	Rank tender offers from the highest number of tender evaluation points to the lowest.
	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.
Method 4 : Financial offer, quality and preferences	1)	Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender Data.
	2)	Score tender evaluation points for financial offer.
	3)	Confirm that Tenderers are eligible for the preferences claimed, and if so, score tender evaluation points for preferencing.
	4)	Calculate total tender evaluation points.
	5)	Rank tender offers from the highest number of tender evaluation points to the lowest.
	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.

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

F.3.11.2 **Evaluation Criteria**

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 bid number 11/2022/23 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

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, 2nd edition 2015***, issued by the South African Institute of Civil Engineering.

e) VOLUME 4: ***The COTO Standard Specifications for Road and Bridge Works for State Road Authorities October 2020***, issued by the Committee of Land Transport Officials.

f) VOLUME 5: TG2 Third Edition August 2020 Technical Guideline: Bitumen Stabilised Materials, A Guideline for the Design and Construction of Bitumen Emulsion and Foamed Bitumen Stabilised Materials

g) ***The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations GNR.929 of 25 June 2014 (Government Gazette No 25207 of 18 July 2014, Notice No R1010)*****, together with all COVID related regulations.*** This document is obtainable separately, and Tenderers shall obtain their own copies.

h) 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 is: Mr. VTN Ntaka

Address	:	Medfontein Building, St Andrew Street, Bloemfontein.
Tel no	:	+27 82 0599 720
Fax no	:	051 409 8575
e-mail	:	ntakav@freetrans.gov.za

The Engineer per GCC 2015 is Mr. Sidwell Ndaba

Address	:	Medfontein Building 00000, St. Andrew Street, BLOEMFONTEIN.
Tel no	:	+27 82 5253 072
Fax no	:	051 409 8575
e-mail	:	ndabaroads@gmail.com

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 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 **9CE** or **8 CEPE** 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 **8 CEPE** 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 **9 CE or 8 CEPE** 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 wishes 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 219
Perm Building
Charlotte Maxeke Street
BLOEMFONTEIN
9300

Location of tender box **:** **Ground Floor of** 45 Charlotte Maxeke Street, Perm Building, Bloemfontein

Identification details **:** Contract no: 051 409 8899 & 051 8891

Description of project **:** Special Maintenance of P23/3 (R707) road between Lindley and Petrusteyn, by the Department of Police, Roads and Transport, for a period of 24 months

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 ***90 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 Pin or 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 **MANDATORY REQUIREMENTS**

- ✓ Valid Original Tax Clearance Certificate or Tax Compliance Status Pin must be attached.
- ✓ Bidders must return all completed and duly signed standard bidding documents (SBD). All documents must be completed with a black ink non-erasable pen and attached all returnable documents.
- ✓ Registration on CSD and the report to be attached or CSD registration number.
- ✓ Bidders must attach a valid **CIDB GRADING 9CE OR 8 CEPE** certificate
- ✓ Letter of authority
- ✓ A joint venture agreement duty signed by both parties, and
- ✓ A certificate of Authority for signature (Power of Attorney).
- ✓ In the case of a joint venture, bidders must submit CIDB grading issued in the name of the joint venture as determined by CIDB and BBBEE issued in the name of the JV.

NB! Failure to comply with the mandatory requirements will lead to disqualification

F3.11.3 **Stage 1: Pre-qualification criteria for preferential procurement**

In terms of PPR 2017, paragraph number four (4), which reads that, if an organ of state decides to apply pre-qualifying criteria to advance certain designated groups, that organ of state must

advertise the tender with a specific tendering condition that only one or more of the following tenderers may respond- (a) a tenderer having a stipulated minimum B-BBEE status level of contributor.

✓Only BBBEE Contributor Level 1 and 2 are eligible to bid.

NOTE: Bidders who fail to meet above pre-qualifying criteria will be disqualified.

F3.11.4 **Scoring quality (Functionality)**

Points for functionality will be allocated according to the table below.

Criterion	Description of criteria	Scoring	Points	Total Points Allocation
Experience	Bidders must submit 5 appointment letters of a similar work undertaken over the past 3 years and Certified Completion Certificate. Appointment letters will only be considered valid if they meet the following criteria: ✓ If on an official client letterhead, ✓ If it refers to provision of similar works successfully completed. ✓ If not older than 3 years, ✓ If contains contact details, signed and dated by authorised personnel.	5 projects of similar type & above	**10**	**10**
		3 – 4 projects of similar type	**6**	
		1 – 2 projects of similar type	**3**	
		0 – Project of similar type	**0**	
Capacity	**Key staff:** Attach CV's and copies of qualifications of Contracts Manager and Site Agent for points to be allocated. Failure to attach will result in no points being allocated.	**Contracts Manager – 10** Years or more of experience and qualification in Civil Engineering N. Dip, B. Tech, Degree. Bidders must attach CV Certified copies of qualifications and signed employment contracts by both employer and accepted by an employee	**10**	**10**
	Capacity to deliver (equipment): Ownership of a plant its critical and Bidders must attach proof (e-natis certificate of ownership) thereof / In case of rental a lease agreement must be attached along with e-natis certificate of ownership of the leaser.	**Contracts Manager** – 5 - 9 years' experience and qualification Bidders must attach CV, Certified copies of qualifications in Civil Engineering and signed employment contracts by both employer and accepted by an employee	**5**	
		0 - 4 years' of experience or no qualification	**0**	
	Ownership (full points per machine) **Rental** (full points per other machines)	**Site agent** 10 or more Years of experience and qualification Bidders must attach CV, Certified copies of qualifications and signed employment contracts by both employer and accepted by an employee	**5**	**5**
		Site Agent 5 - 9 years of experience and relevant qualification Bidders must be attach CV, Certified copies of qualifications and signed employment contracts by both employer and accepted by an employee	**3**	
		Chip Spreader	**1**	**15**
		Two (2) or more Water carts	**2**	
		Two (2) or more Graders	**2**	
		Recycling machine one or more	**3**	
		Four (4) or more tipper Trucks	**2**	
		Pneumatic roller Compactor	**2**	
		Two (2) Steel roller Compactors	**2**	
		One (1) or more Excavators	**1**	
Locality: Locally based within boarders of South Africa	**Proof of Municipal accounts rates Not older than 3 months, but also not in arrears for more than 3 months; or certified lease agreement or a rental invoice.**	Provincially based	**5**	**5**
		Outside Free State Province based offices	**3**	
		Internationally	**0**	
				45

NB: A tender that fails to obtain the minimum qualifying score of 27 points for functionality as indicated in the *GRID* above is not an acceptable tender, further all tenders that obtained the minimum qualifying score for functionality must be evaluated in terms of price and the preference point system.

F3.11.5 **Stage 3: Price and B-BBEE Status**

Assessment for stage 3 will be evaluated on 90/10 preferential point system:
Price : 90
B-BBEE Status Level : 10

Price: 90: The lowest acceptable Bidder qualify for maximum points of 90 for price. These points will be for the Total Bid Offer. The points for price will be calculated according to clause 6, item 1 of the PPPFA 2017

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 P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS

PART T2 : RETURNABLE DOCUMENTS

CONTENTS

SECTION	DESCRIPTION		PAGE
T2.1	LIST OF RETURNABLE DOCUMENTS	T2-2	
T2.2	RETURNABLE SCHEDULES	T2-3	
	T2.2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES		T2-3
	T2.2.2 PREFERENTIAL PROCUREMENT SCHEDULES 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

SECTION	DESCRIPTION	PAGE
SCHEDULE A	RECORD OF ADDENDA TO TENDER DOCUMENTS	T2-4
SCHEDULE B	CERTIFICATE OF AUTHORITY	T2-5
SCHEDULE C	COMPULSORY ENTERPRISE QUESTIONNAIRE	T2-8
SCHEDULE D	PLANT AND EQUIPMENT	T2-11
SCHEDULE E	EXPERIENCE OF TENDERER	T2-13
SCHEDULE G	TENDERER'S KEY PERSONNEL	T2-17
SCHEDULE H	PRELIMINARY PROGRAMME	T2-19
SCHEDULE I	AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES	T2-21
SCHEDULE J	TENDERER'S HEALTH AND SAFETY PLAN AND DECLARATION	T2-23
SCHEDULE K	TENDERER'S CERTIFICATE OF REGISTRATION WITH CIDB	T2-27
SCHEDULE L	TAX CLEARANCE CERTIFICATE/S	T2-28
SCHEDULE M	PREFERENCIAL PROCUREMENT REGULATIONS 2017	T2-30
SCHEDULE N	DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS	T2-36
SCHEDULE O	DECLARATION OF INTEREST	T2-39
SCHEDULE P	PROMOTION OF ENTERPRISES LOCATED IN THE FREE STATE PROVINCE	T2-42
SCHEDULE Q	DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES	T2-44
SCHEDULE R	CERTIFICATE OF INDEPENDENT BID DETERMINATION	T2-46

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: RECORD OF ADDENDA TO TENDER DOCUMENTS

I / We confirm that the following communication/s, amending the tender documents, received from the Employer or his representative before the closing date for submission of this tender offer, have been taken into account in this tender offer:

Addendum no.	Date	Title or details
1		
2		
3		
4		
5		
6		
7		
8		

SIGNATURE: .....……...……...

SCHEDULE B: 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.

(i) COMPANY	(ii) CLOSE CORPORATION	(iii) PARTNERSHIP	(iv) JOINT VENTURE	(v) SOLE PROPRIETOR

(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.

NAME	ADDRESS	SIGNATURE	DATE

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

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 C : ` 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 :

Name*	Identity number*	Personal income tax number*

***** 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:

- ☐ a member of any municipal council
- ☐ a member of any provincial legislature
- ☐ a member of the National Assembly or the National Council of Province
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity
- ☐ 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)
- ☐ a member of an accounting authority of any national or provincial public entity
- ☐ an employee of Parliament or a provincial legislature

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:

- ☐ a member of any municipal council
- ☐ a member of any provincial legislature
- ☐ a member of the National Assembly or the National Council of Province
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity
- ☐ 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)
- ☐ a member of an accounting authority of any national or provincial public entity
- ☐ 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 D: PLANT AND EQUIPMENT

The following are a list of major items of relevant equipment that I / we presently own and will have available for this contract if my / our tender is accepted.

(a) Details of major equipment that is owned by me / us and immediately available for this contract.

DESCRIPTION *(type, size, capacity etc.)*	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required

(b) Details of major equipment that will be hired, or acquired for this contract if my / our tender is accepted

DESCRIPTION *(type, size, capacity etc.)*	QUANTITY	HOW ACQUIRED	
		HIRE/ BUY	SOURCE

Note: Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

SIGNATURE: .....……...……...

ATTACH THE PLANT AND EQUIPMENT LIST/S HERE

SCHEDULE E: EXPERIENCE OF TENDERER

The following is a statement of work of similar nature recently successfully executed by myself / ourselves:

EMPLOYER: CONTACT PERSON AND TELEPHONE NUMBER	CONSULTING ENGINEER: CONTACT PERSON AND TELEPHONE NUMBER	NATURE OF WORK	VALUE OF WORK (inclusive of VAT)	DATE COMPLETED OR EXPECTED TO BE COMPLETED

SIGNATURE: .....……...……...

ATTACH THE LIST HERE IF SEPARATE LIST IS PROVIDED

SCHEDULE G: TENDERERS' KEY PERSONNEL

NAME	POSITION	NQF QUALIFICATION

SIGNATURE: .....……...……...

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

SCHEDULE H: 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													

[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 I: 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

PAGE	CLAUSE OR ITEM NO	PROPOSED AMENDMENT AND QUALIFICATIONS

[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

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

[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 J: CONTRACTOR'S HEALTH AND SAFETY PLAN AND DECLARATION

In terms of Clause 4(4) of the OHSA 1993 Construction Regulations 2003 (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 OHSA 1993 Construction Regulations 2003.

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 OHSA 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 OHSA 1993 Construction Regulations 2003 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 OHSA 1993 Construction Regulations 2003, 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 OHSA 1993 Construction Regulations 2003, 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 OHSA 1993 Construction Regulations 2003 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, including COVID 19 OHS regulations 2020, 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 2003 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			

SCHEDULE K: CONTRACTOR'S CERTIFICATE OF REGISTRATION WITH CIDB

[The Tenderer shall attach hereto the Contractor's Certificate of Registration with CIDB. Failure to submit the certificate with the tender document will lead to the conclusion that the Tenderer is not registered with the CIDB and therefore not eligible to tender].

SCHEDULE L: TAX CLEARANCE REQUIREMENTS

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 Pin or 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.

5. Applications for the Tax Clearance Certificates may also be made via E-Filing. In order to use this provision, taxpayers will need to register with SARS as E-Filers through the website www.sars.gov.za.

6. Tax pin document with updated information can be attach to verify the validity of SARS bid status

SCHEDULE M: **SBD 6.1**

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

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.

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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

a) The value of this bid is estimated to exceed/not exceed R50 000 000 (all applicable taxes included) and therefore the …….. preference point system shall be applicable; or

b) Either the 80/20 or 90/10 preference point system will be applicable to this tender (*delete whichever is not applicable for this tender*).

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:

	POINTS
PRICE	
B-BBEE STATUS LEVEL OF CONTRIBUTOR	
Total points for Price and B-BBEE must not exceed	**100**

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;

(b) "**B-BBEE status level of contributor"** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

"bid" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised

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competitive bidding processes or proposals;

(c) **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

(d) "EME" means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;

(e) **"Functionality"** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.

(f) **"prices"** includes all applicable taxes less all unconditional discounts;

(g) **"proof of B-BBEE status level of contributor"** means:

1) B-BBEE Status level certificate issued by an authorized body or person;

2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;

3) Any other requirement prescribed in terms of the B-BBEE Act;

(h) **"QSE"** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;

(i) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 **or** **90/10**

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right) \quad \text{or} \quad Ps = 90\left(1 - \frac{Pt - P\min}{P\min}\right)$$

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

Pmin = Price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

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		NO	

7.1.1 If yes, indicate:

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

(Tick applicable box)

YES		NO	

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

Designated Group: An EME or QSE which is at last 51% owned by:	**EME** √	**QSE** √
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		
OR		
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 authorized 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 certificate, 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 favorable 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 …….. …….	…… SIGNATURE(S) OF BIDDERS(S) DATE: …….. ADDRESS …….. …….. ……..

SCHEDULE N: SBD 6.2

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:

$$LC = [1 - \frac{x}{y}] * 100$$

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 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:

Description of services, works or goods	Stipulated minimum threshold
_____	_____%

_____ _____%

_____ _____%

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

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

Currency	**Rates of exchange**
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. 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:** _____

1. SECTOR DESIGNATION

1.1 The stipulated minimum threshold percentages for local production and content in respect of bagged and bulk cement produced using locally produced raw materials areas follows:

Cement Type	Description	Application	Stipulated Minimum Threshold
Road Cem I	Pure Portland cement with a 95-100% clinker.	All civil and building construction as appropriate	100%
Road Cem II	Portland cement containing varying additions of secondary materials, i.e. fly ash, pozzolana, slag, silica fume, or limestone	All civil and building construction as appropriate	100%
Road Cem III	blast furnace cement, 50% OPC, 50% blast furnace slag	All civil and building construction as appropriate	100%
Road Cem IV	pozzolanic cement, OPC and fly ash	All civil and building construction as appropriate	100%
Road Cem V	Composite cement: slagand ash cement. Blended cements with more than one blending material	All civil and building construction as appropriate	100%
Masonry cement	Mixture of Portland cement and plasticizing materials such as limestone to improve setting time	use in mortar, brick, block, and stone masonry construction	100%

1.2 In the designation, all the cement types contained in the above table must be manufactured using locally produced clinker and locally sourced secondary materials (e.g. gypsum, fly ash, ground granulated blast furnace slag, limestone and silica fume.

1.3 In terms of bagged cement, the imported component of the packaging bag used in the manufacture and packaging of cement will be deemed to have been sourced locally. These inputs should be imported in raw material form for further fabrication in South Africa. The imported input raw materials (paper), as specified above, used in the packaging of cement will be deemed to have been sourced locally for the purposes ofcalculating local content.

All the cement types in the above table must comply with the requirements of SANS 50197 or SANS 50413 and are required to have a Letter of Authority (LoA) issued by the National Regulator for Compulsory Standards (NRCS)

SBD 4
BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and/or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors/trustees/shareholders/members/partners or any person having a controlling interest1 in the enterprise,
employed by the state? **YES/NO**

1.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of directors/trustees /shareholders/members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	**Identity Number**	**Name of State institution**

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:
……
……

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:
…….

1 the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

…….

3 DECLARATION

I, the undersigned, (name)…… in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

3.1 I have read and I understand the contents of this disclosure;

3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;

3.3 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 consortium2 will not be construed as collusive bidding.

3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

3.4 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.

3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

3.6 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.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

……	..……
Signature	Date
……	……
Position	Name of bidder

PR&T/BID No. 11/2022/23

SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS

THE CONTRACT

PART C1 : AGREEMENTS AND CONTRACT DATA

PART C2 : PRICING DATA

PART C1 : AGREEMENTS AND CONTRACT DATA

CONTENTS

SECTION	DESCRIPTION	PAGE
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 P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS
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)

WHICH WILL INCLUDE A MINIMUM SUBCONTRACTING VALUE OF:

……Rand
(in words):

R ……...
(in figures, which will be equivalent to 30% of the contract amount in line with item 33 of the Contract Data)

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:	Witness:
. . . . . . Signature . . . . . . Name and Surname . . . . . . Capacity	. . . . . . Signature . . . . . . Name

Name and address of organization . . . . . .

. . . .

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 authorized 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 Organization: . . . . . .

. . . . . .

. . . . . .

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 authorized 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 organization:		Name and address of organization:
……		……
……		……
……		……
……	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

SECTION	DESCRIPTION	PAGE
C1.2.1	CONDITIONS OF CONTRACT	C1-8
C1.2.2	CONTRACT SPECIFIC DATA	C1-10
C1.2.3	DATA PROVIDED BY THE TENDERER	C1-16

C1.2.1 CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works – 3rd 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 2.2 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 2017 (Government Gazette No 25207 of 18 July 2003, Notice No R1010***)*** will in all respects be applicable to this contract, including all regulations pertaining to the COVID 19 compliance."

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*. The latest indices for L (certain urban areas only), P, M and F, are more readily obtainable in* 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".

C1.2.2 CONTRACT SPECIFIC DATA

ITEM No:	REFERENCE TO:	CLAUSE	INFORMATION
1	Contractor	1.1.1.9	……
2	Defects Liability Period	1.1.1.13	24 Months from issuing of Certificate of Practical Completion
3	Practical Completion	1.1.1.14	The time for achieving Practical Completion is calculated from commencement date to the time when the entire road is ready for public use without posing risk to users.
4	Employer	1.1.1.15	Free State Provincial Government represented by Head of Department: Department of Police, Roads and Transport
5	Engineer	1.1.1.16	Department of Police, Roads and Transport
6	Address of the Employer	1.2.1.2	Physical: 45 Charlotte Maxeke Street Bloemfontein 9300 Postal: P.O Box 690 Bloemfontein 9300 Telephone No: (051) 409 8575
7	Address of the Contractor	1.2.1.2	Physical Address:…… …… Postal Address: …… …… Telephone Number (Office): …… Facsimile Number (Office): …… E-mail Address (Office): ……

8	Commencement of Work	5.2	Within 45 days after site hand over, contractual obligations, compliance with Construction Regulations 2014 and Environmental Compliance
9	Documentation required before commencement of the Works	5.3.1	Health & Safety Plan (Refer to CR 2014) Revised Programme & Cash flow Projection (Refer to Clause 5.6) Security (Performance and retention guarantee 6.2) Insurance (CAR Construction All Risk to Clause 8.6) Construction Permit (CR 2014) Environmental compliance i.e. (mining permit, water usage etc.)
10	Time to submit the documentation required before commencement of the Works	5.3.2	14 Days for all above documents excluding the Construction permit
11	Completion of the Works	5.6.2.1	Twenty four (24) Months starting from the date of site hand over
12	Special non-working times	5.8	Sundays and all public holidays as well as year-end builder's break.
13	Suspension of Works	5.11	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 to stop the Works and or claim interest on the unpaid Works. **No claim shall be submitted to the Department once the budget is depleted.**
14	Penalty for failing to complete the Works on time	5.13.1	**R10,000** per calendar day (R0,000 to R49,000) million project value **R15,000** per calendar day (R50,000 to R99,000) million project value **R50,000** per calendar day (R100,000 to unlimited) million project value
15	Latent Defects Liability Period	5.16.3	Should there be any structural defects within Fifteen (15) years after final completion, the Contractor will be fully liable for latent defects
16	Security	6.2.1	Two (2) Performance Guarantee of 10% (normal performance guarantee and Mining permit guarantee) of the value of the Works which will be handed back after practical completion, to be submitted within 14 days after the site hand over date. Expiry date should state **"until the issuing of Practical Completion certificate"**

			Rehabilitation quantum guarantee should be deducted from the performance guarantee upon full computation of the amount by Department of Mineral Resources and Energy (DMRE). Guarantee should be addressed to DMRE.
17	Dayworks	6.5.1.2.3	Refer to A1.2.3.11 of the Specifications (Ordering of daywork)
18	Rates and Prices are final and binding	6.8	All rate items on the Bill of Quantity must be priced in Rand value except only where the rate is stipulated as **Rate Only** item. Items that will be priced not with Rand value will be termed or taken as incomplete tender and will be disqualified. Rather price Zero Rand for any uncounted action
19	Contract Price Adjustment	6.8.2	The following values for the different factors are to be used: X = 0.10 a = 0.10 - Labour b = 0.55 - Equipment c = 0.15 - Material d = 0.20 - Fuel 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. The Base month is one month prior to submission of quotations / Bid document.
20	Special Materials	6.8.3	Price adjustments for variations in the costs of special materials are allowed. Special materials shall be limited to bitumen and bituminous products.
21	Materials on Site	6.10.1.5	80% Of materials on site
22	Retention Money	6.10.3	10% Of Contract Amount. Two retention Guarantees of 50% of 10% each of the value of the retention money are compulsory as part of documentation to be submitted within 14 days after the commencement date; one will be handed back at practical completion and the other **24 months** after final completion. There will be no retention monies deducted on interim certificates.
23	Quality of materials and workmanship	7.2	The source of supply of all materials including all stone, sand, gravel, water or soil or any other natural material required in the execution of the Works shall be located by the Contractor. The quality of the material relies solely to

			the Contractor. **No material shall be used until it has been approved by the Engineer**
24	Defects	7.8	In the event of the Contractor not completing all the outstanding work within the period specified by the Employer in terms of the contract, the Employer shall have the right to extend the Period of Maintenance by the additional time taken by the Contractor to complete such outstanding work to the satisfaction of the Employer. The full retention applicable to the Period of Maintenance shall apply to such extension.
25	Insurances	8.6	R0-00
26	Limit of Indemnity	8.6.1.3	R10,000,000-00 per claim, number of claims unlimited
27	Other Insurances	8.6.1.5	R0-00
28	Dispute Resolution	10.5.1	Dispute Adjudication Board (DAB), Mediation,
29	Rules for Adjudication and Members	10.5.3	Only Three members required
30	Dispute Resolution	10.7.1	Adjudication (If there are no agreements, then court proceeding will be preferred)
31	Tender Validity Period		90 days
32	Scope	B.1	Special Maintenance of P15/2&3 road between Viljoenskroon on R59 intersection to Orkney, by the Department of Police, Roads and Transport, for a period of 24 months
33	Targeted Subcontractors (ABE's)	B.2	Part C3: Scope of Works: C3.7.1.2 (3.1) - 30% of Nett Contract Value excluding Professional Services (Laboratory, OHS practitioners, environmental and engineer's requirement) must be subcontracted to Local Contractors appointed in terms of attached specification.
34	Targeted Local labour	B.3	1. Net Contract amount less 30% for minimum daily rate on R1Million per 4 employees for conventional project should be appointed with a minimum of six months at a payment rate of **R186/day,** subjected to increase annually to be communicated by the client. 2. Recruitment of annual labour target shall be as follows: • 30% - at the beginning of the financial year • 30% - three months after the initial appointment • 40% - at midway into the financial year

			3. The employment demographics are as follows: • Youth – 55% • Female – 60% • Disabled – 2% Labour target must be achieved as planned, failure to this will lead into penalties
35	Socio – Economic of Community	B.4	1% of (Contract Value) excluding special services e.g. testing, environmental and OHS and Engineering facilities shall be invested into local Community as social responsibility or contribution
36	Skills Development	B.5	1. Two (2) Civil Engineering Students shall be appointed for experiential Training with stipend of R15 000.00 each per month, signed off reports must be submitted to respective Departmental Project Managers. 2. Members of Community must also be trained in Labor Intensive Works
37	Approved Professionals	B.6	All the approved and submitted CV for professionals during tendering/ bidding stage must be available on site during the project implementation. Failure to bring at least 100% of all professionals that were presented via CV's during the bidding process will lead to termination of the Contract. Should it be found that people / professionals' CV used were only for tendering purpose the appointment will be terminated. During the signing of the Service Level Agreement (SLA) or project award and commencement stage, all CV's for professionals submitted and the valid Employment Contract must be re-submitted as a Special Condition of this Contract. Failure to adhere to this will result in appointment termination. Any replacement of professional, should be replaced by an employee with equivalent experience and qualifications, subject to approval by the client.
38	Skills Developments	B.7	0.2% Of the contract amount to the maximum of R2,000,000.00 to be allocated and pay out to CIDB for external entity identified by the CIDB
39		B.8	
40		B.9	

……..

SIGNATURE

C1.2.3 DATA PROVIDED BY THE TENDERER

Clause 6.8.3 of the GCC:

Variation in Cost of Special Materials	**Unit on which variation will be determined** *	**Rate or price for the base Month (excluding VAT)** **

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, labor or any other costs. When called upon to do so, the Tenderer shall substantiate the above prices with acceptable documentary evidence.

……..

SIGNATURE

SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS

Part C3 Specification for the Work

TABLE OF CONTENTS **PAGE**

PART A : GENERAL		C3-5
PS1	EMPLOYER'S OBJECTIVES	C3-5
PS2	LOCATION OF THE WORKS	C3-5
PS3	EXTENT OF THE WORKS	C3-5
PS4	NATURE OF GROUND AND SUBSOIL CONDITIONS	C3-6
PS5	CONSTRUCTION AND MANAGEMENT REQUIREMENTS	C3-6
PS6	SITE FACILITIES	C3-7
PS7	REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC	C3-8
PS8	OCCUPATIONAL HEALTH AND SAFETY	C3-9
PART B: AMENDMENTS TO STANDARD SPECIFICATIONS		C3-5
B1.2	GENERAL REQUIREMENTS AND PROVISION	C3-5
B1.3	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONSUTHORITY FOR SIGNATORY	C3-5
B1.5	ACCOMMODATION OF TRAFFIC	C3-5
B4.1	BORROW MATERIALS	
B4.4	COMMERCIAL MATERIALS	
B5.3	ROAD PAVEMENT LAYERS	
B5.4	STABILISATION	
B8.1	PRIME COAT	
B8.2	COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS	
B9.1	ASPHALT LAYERS	

PART C3 SCOPE OF WORKS

SECTION C3.1 STANDARD SPECIFICATIONS

The standard specifications on which this contract is based are the **"Standard Specifications for Road and Bridge Works for State Road Authorities – October 2020 Edition"** prepared and drafted by COTO.

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SABS) in Pretoria

SANS 1914-1 to 6 (2002):	Targeted Construction Procurement
SANS 1921-1 (2004):	Construction and Management Requirements for Works Contracts Part 1: General Engineering and Construction Works and where accommodation of traffic is involved.
SANS 1921-2 (2004):	Construction and Management Requirements for Works Contracts; and Part 2: Accommodation of Traffic on Public Roads Occupied by the Contractor.
SARTSM regulations	Road Signs and Road Marking Manuals

All references to SABS Standards which are replaced with corresponding SANS Specifications, have to be read in their new format.

SECTION C3.2 : PROJECT SPECIFICATIONS

The Project Specifications, consisting of two parts, form an integral part of the Contract and supplements the Standard Specifications.

PART A contains a general description of the works, the site and the requirements to be met.

PART B contains variations, amendments and additions to the Standard Specifications and, if applicable, the Particular Specifications.

PART C contains specifications to be followed for 30% subcontracting and local SMME's participation.

PART D contains specifications for Occupational Health and Safety including the baseline risk assessment.

PART E contains specifications for Environmental Compliance.

In the event of any discrepancy between a part or parts of the Standardized or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Engineer with a consultation to the Employer before the execution of the work under the relevant item (in the form of Addendum).

PART A: GENERAL

PS1 EMPLOYER'S OBJECTIVES

The Employer's general objective is to Maintain and rehabilitate the 35 km route between on P23/3 starting at Lindley on the (R707) to the North Easterly direction leading to Petrusteyn for the distance of (thirty-five) 35km long.

- The project offers employment job opportunities and also uplift the local community.
- To deliver suitable public infrastructure in a cost effective way,
- Create employment and up-improve job opportunities for local communities and contractors.
- To improve mobility and access to nearby towns for transportation facilities as part of economic growth.

This project has the following particular objectives:

- Create employment for 4 laborers for every one million spent.
- Create employment opportunities for local subcontractors, with a total of 30% of contract value (excl. CPA and Contingencies).
- Provide work experience for two departmental students.
- To provide training for local labor in social as well as in labor intensive construction skills.

PS2 LOCATION OF THE WORKS

Refer to the locality plan included in Part C4 of this document.

SECTION 1.2: GENERAL REQUIREMENTS AND PROVISIONS

BA1.2.3 GENERAL

Replace Clause A1.2.3 with the following:

"The General Conditions of Contract for Construction Works, 3rd Edition 2015, published by the South African Institute of Civil Engineering, together with the Special Conditions of Contract, forming part of the contract, will be applied".

All references in the COTO Standard Specifications have been amended accordingly to reflect the appropriate General Conditions of Contract relevant for the Contract. Each COTO clause reference is tabulated in Table 1.2/1 below (context of reference is also given) together with the relevant equivalent clause in the SAICE General Conditions of Contract for Construction Works applicable for this contract. All references to the "schedule of quantities" in the Standard Specifications shall be amended to the "Bill of Quantities".

Whereas every effort has been made to include all of the affected clauses in the table, there may be some omissions. In every case, however, the SAICE General Conditions of Contract for Construction Works, as amended by the Special Conditions of Contract in Part C1.2: Contract Data of this Volume, shall apply and the Contractor shall be responsible for the interpretation of the equivalent clause.

TABLE 1.2/1

REFERENCES IN COTO STANDARD SPECIFICATIONS TO THE RELEVANT SAICE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS 2015

COTO Standard Specifications for Road and Bridge Works for South African Road Authorities (Draft Standard) (October 2020)		**SAICE General Conditions of Contract for Construction Works 3rd Edition 2015**	
Clause no.	**Description or Reference**	**Clause no.**	**Description or Reference**
A1.2.3.4	Extension of time for delays caused by rainfall	5.12	Extension of time for Practical Completion
A1.2.3.5	Handing-over of the site of the works	5.4	Access to site
A1.2.3.7	Legal and Contractual requirements and responsibility to the public and Employer	4.3	Legal Provisions
A1.2.3.10	Notices, signs and advertisements	4.5	Notices and Fees
A1.2.3.11	Ordering of daywork	6.5	Dayworks
A1.2.3.14	Remedial Work	7.9	Urgent remedial work
A1.2.3.19	Temporary drainage and dewatering	8.1& 8.2	Protection of works & Care of the works
A1.2.7.1	Programme of work	5.6	Programme

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C1.2.1			**Environmental Management**				
	C1.2.1.1		Monitoring of compliance with and reporting on the EMP	month	24		R -
	C1.2.1.2		Dedicated environmental officer *(if specified in the Contract Documentation)*	month	24		R -
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**				
	C 1.2.3.1		Grass cutting	hectare (ha)			Rate Only
	C1.2.3.2		Drain cleaning	kilometre (km)			Rate Only
	C1.2.3.3		Cleaning out culverts	cubic metre (m^3)			Rate Only
	C1.2.3.4		Collection of rubbish / litter	kilometre (km)	960		R -
	C1.2.3.5		Base patching using crushed stone material stabilised with	cubic metre (m^3)			Rate Only
	C1.2.3.6		Base and/or surface patching using cold premixed asphalt	kilogram (kg)			Rate Only
	C1.2.3.7		Base and/or surface patching using hot plant mixed asphalt	ton (t)			Rate Only
	C1.2.3.8		Replacement of damaged guardrails including posts	metre (m)			Rate Only
	C1.2.3.9		Grading of temporary gravel deviations and existing roads used as detours	kilometre (km)			Rate Only
	C1.2.3.10		Watering of temporary gravel deviations and existing roads	kilolitre (kℓ)	10000		R -
	C1.2.3.11		Other road maintenance work ordered by the Engineer	provisional sum	Prov	60000	R 60 000,00
	C1.2.3.12		Handling cost, profit and all other charges in respect of item	percentage (%)	R 60 000,00		R -
	C1.2.3.13		Liaison with the routine road maintenance contractor	month			
C1.2.4			**Stakeholder liaison**	month			
C1.2.5			**Safety**				
	C1.2.5.1		Health and safety plan	lump sum	1		R -
	C1.2.5.2		Implementation of health and safety plan	month	24		R -
C1.2.8			**Dayworks**				
	C1.2.8.1		Personnel				
		(a)	Unskilled labourer	hour (h)	80		R -
		(b)	Semi-skilled labourer	hour (h)	80		R -
		(c)	Skilled labourer	hour (h)	80		R -
		(d)	Gang leader	hour (h)	40		R -
		(e)	Foreman	hour (h)	20		R -
		(f)	Skilled artisan	hour (h)	20		R -
	C1.2.8.2		Construction equipment *(specify size and/or model number)*				
		(a)	Motor grader (140G or equivalent)	hour (h)	55		R -
		(b)	Vibratory roller (Min 15 Tons)	hour (h)	55		R -
		(c)	Smooth Roller (Min 12 Tons)		55		R -
		(d)	Pneumatic roller (21 Tons)	hour (h)	55		R -
		(e)	Front end loader (930 or equivalent)	hour (h)	110		R -
		(f)	Tractor loader backhoe	hour (h)	55		R -
		(g)	Excavator (Min 21 Tons)	hour (h)	55		R -
		(h)	Compressor	hour (h)	55		R -
		(i)	Tipper trucks (Min 6 m^3 and 10m^3)				
		(j)	Other equipment *(specify)*	hour (h)			Rate Only
	C1.2.8.3		Vehicles *(specify size)*				
		(a)	Light delivery vehicle	kilometre (km)	500		R -
		(b)	Flatbed truck	kilometre (km)	100		R -
		(c)	Dump truck	kilometre (km)	100		R -
		(d)	Other vehicles *(specify)*	kilometre (km)	100		R -
	C1.2.8.4		Materials				
		(a)	Procurement of materials	provisional sum	1	R 100 000,00	R 100 000,00
		(b)	Contractor's handling costs, profit and all other charges in	percentage (%)	R 100 000,00		R -
PC1.2.10			**Dispute Adjudication Board (DAB)**	*Note to compiler: If a DAB will be appointed add this payitem C1.2.10 for 50% of the estimated cost of the DAB*			
	C1.2.10.1		Employer's contribution to DAB (50%)	prime cost (PC) sum	Prime	Cost	R 100 000,00
PC 1.2.11	C1.2.12.(i)		**Site Surveyor** for Engineer's quality Assurance/ acceptance control	Provisional Sum	1	R 400 000,00	R 400 000,00
	C1.2.12.(ii)		Contractor's handling cost and profit in respect of sub-item C1.2.12(i)	%	R 400 000,00		R -
PC 1.2.12	C 1.2.12 (i)		Occupational Health and Safety Agent for Engineer's quality Assurance/ acceptance control	Provisional Sum	1	R 750 000,00	R 750 000,00
	C 1.2.12 (ii)		Contractor's handling cost and profit in respect of sub-item C1.2.13(i)	%	R 750 000,00		R -
PC 1.2.13	C1.2.13 (i)		**Environmental Compliance Agent** for Engineer's quality Assurance/ acceptance control	Provisional Sum	1	R 550 000,00	R 550 000,00
	C1.2.13 (ii)		Contractor's handling cost and profit in respect of sub-item C1.2.14(i)	%	R 550 000,00		R -
TOTAL CARRIED FORWARD TO SUMMARY							

C1.3 **CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
PC1.3.1			**The Contractor's general obligations**				
	C1.3.1.1		Fixed obligations	lump sum	1		R -
	C1.3.1.2		Value-related obligations	lump sum	lump	sum	R -
	C1.3.1.3		**Time-related obligations**				
		(a)	Mobilisation period	month	1		R -
		(b)	Execution of the works	month	24		R -
C1.3.2			**Contract sign boards**	square metre (m^2)	30		R -
TOTAL CARRIED FORWARD TO SUMMARY							**R -**

C1.4 **FACILITIES FOR THE ENGINEER**

ITEM		DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C1.4.1		**Site accommodation**				
	C1.4.1.1	Offices and conference room	square metre (m^2)	140		R -
	C1.4.1.2	Laboratories	square metre (m^2)	140		R -
	C1.4.1.3	Open concrete working floors and verandas	square metre (m^2)	200		R -
	C1.4.1.4	Roofs over open concrete working floors and verandas	square metre (m^2)	90		R -
	C1.4.1.5	Store rooms inside the laboratory	square metre (m^2)	50		R -
	C1.4.1.6	Car ports	number (No.)	5		R -
	C1.4.1.7	Ablution unit *(equipped as specified)*	number (No.)	2		R -
	C1.4.1.8	Change room with a shower	number (No.)	2		Rate Only
	C1.4.1.9	Kitchen unit *(equipped as specified)*	number (No.)	2		R -
	C1.4.1.10	Type A prefabricated house *(equipped as specified)*	number (No.)			Rate Only
	C1.4.1.11	Type B prefabricated house *(equipped as specified)*	number (No.)			Rate Only
	C1.4.1.12	Type C prefabricated house *(equipped as specified)*	number (No.)			Rate Only
	C1.4.1.13	Rented housing paid for by the Contractor	provisional sum	Prov	R 80 000,00	R 80 000,00
	C1.4.1.14	Contractor's handling costs, profit and all other charges in respect of item C1.4.1.13	percentage (%)	R 80 000,00		R -
C1.4.2		**Items measured by area**				
	C1.4.2.1	Shelving as specified, complete with brackets	square metre (m^2)	10		R -
	C1.4.2.2	Work benches with a concrete slab top	square metre (m^2)	15		R -
	C1.4.2.3	Work-benches with a wooden top	square metre (m^2)	15		R -
	C1.4.2.4	Constant-temperature baths of concrete and/or plastered brick	square metre (m^2)	10		R -
	C1.4.2.5	Concrete footings and pedestals for laboratory equipment	square metre (m^2)	10		R -
	C1.4.2.6	Roller blinds, opaque type	square metre (m^2)	10		R -
	C1.4.2.7	Venetian blinds	square metre (m^2)	10		R -
	C1.4.2.8	Notice boards	square metre (m^2)	10		R -
	C1.4.2.9	White boards	square metre (m^2)	10		R -
	C1.4.2.10	Galvanised wire mesh fencing for store rooms	square metre (m^2)	10		R -
	C1.4.2.11	Galvanised wire mesh store room gate with a padlock	square metre (m^2)	10		R -
C1.4.3		**Items measured by number**				
	C1.4.3.1	Office swivel chair	number (No.)	2		R -
	C1.4.3.2	Office chair	number (No.)	10		R -
	C1.4.3.3	Draughtsman's stool	number (No.)	1		R -
	C1.4.3.4	Laboratory high chair	number (No.)	4		R -
	C1.4.3.5	Office desk with 3 drawers *(at least one lockable drawer)*	number (No.)	3		R -
	C1.4.3.6	Typist desk *(L-shaped)*	number (No.)	1		R -
	C1.4.3.7	Drawing table	number (No.)	1		R -
	C1.4.3.8	Conference table	number (No.)	1		R -
	C1.4.3.9	Bookcase	number (No.)	1		R -
	C1.4.3.10	Filing cabinet	number (No.)	3		R -
	C1.4.3.11	General purpose steel cabinet with shelves	number (No.)	2		R -
	C1.4.3.12	Wall mounted pivot plan filing system	number (No.)	2		R -
	C1.4.3.13	220/250 volt power outlet plug point	number (No.)	2		R -
	C1.4.3.14	400/231 volt 3-phase power outlet plug point	number (No.)	2		R -
	C1.4.3.15	Single 1500m, 58 watt fluorescent tube ceiling light	number (No.)	10		R -
	C1.4.3.16	Single 1500mm, 22 watt LED tube ceiling light	number (No.)	10		R -
	C1.4.3.17	11 watt compact fluorescent bulb ceiling light	number (No.)	10		R -
	C1.4.3.18	7 watt LED bulb ceiling light	number (No.)	5		R -
	C1.4.3.19	Wash-hand basin	number (No.)	2		R -
	C1.4.3.20	Laboratory basin	number (No.)	1		R -
	C1.4.3.21	Extractor fan	number (No.)	2		R -
	C1.4.3.22	Fume cupboard	number (No.)	2		R -
	C1.4.3.23	Fire extinguisher 9,0 kg, dry powder type	number (No.)	3		R -
	C1.4.3.24	Air-conditioning unit	number (No.)	2		R -
	C1.4.3.25	Heater	number (No.)	2		R -
	C1.4.3.26	Concrete specimen curing bath	number (No.)	3		R -
	C1.4.3.27	Waste paper basket	number (No.)	2		R -
	C1.4.3.28	UPS / Voltage stabiliser	number (No.)	2		R -
	C1.4.3.29	A3 / A4 colour printer, copier, scanner	number (No.)	2		R -
	C1.4.3.30	A4 colour printer, copier, scanner	number (No.)			Rate Only
	C1.4.3.31	Rain gauge	number (No.)	3		R -
	C1.4.3.32	Minimum/maximum atmospheric temperature gauge	number (No.)	2		R -
	C1.4.3.33	Digital thermometer	number (No.)	2		R -
	C1.4.3.34	Mobile outdoor weather station	number (No.)	2		R -
	C1.4.3.35	3,0m aluminium straight edge complete with two measuring wedges	number (No.)	2		R -
	C1.4.3.36	Measuring wheel	number (No.)	2		R -
	C1.4.3.37	First aid kit	number (No.)	2		R -
	C1.4.3.38	Standpipe complete with 30m of 19mm dia. heavy duty hose pipe	number (No.)	2		R -
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	prime cost (PC) sum	prime	35000	R 35 000,00
	C1.4.4.2	Handling costs and profit in respect of item C1.4.4.1	percentage (%)	R 35 000,00		R -
	C1.4.4.5	The provision of internet connectivity and WiFi data for Engineer's site staff	prime cost (PC) sum	prime	45000	R 48 000,00
	C1.4.4.6	Handling costs and profit in respect of item C1.4.4.5	percentage (%)	R 48 000,00		R -
	C1.4.4.7	The provision of paper and ink for a combination colour printer/copier/scanner	prime cost (PC) sum	prime	25000	R 25 000,00
	C1.4.4.8	Handling costs and profit in respect of item C1.4.4.7	percentage (%)	R 25 000,00		R -
	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.	prime cost (PC) sum	prime	30000	R 30 000,00
	C1.4.4.10	Handling costs and profit in respect of item C1.4.4.9	percentage (%)	R 30 000,00		R -
	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.	prime cost (PC) sum	prime	35000	R 35 000,00
	C1.4.4.12	Handling costs and profit in respect of item C1.4.4.11	percentage (%)	R 35 000,00		R -
	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	prime cost (PC) sum	prime	45000	R 45 000,00
	C1.4.4.14	Handling costs and profit in respect of item C1.4.4.13	percentage (%)	R 45 000,00		R -
	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	prime cost (PC) sum	prime	80000	R 80 000,00
	C1.4.4.16	Handling costs and profit in respect of item C1.4.4.15	percentage (%)	R 80 000,00		R -
C1.4.5		**Services at site offices, laboratories and site accommodation**				
	C1.4.5.1	Fixed costs	lump sum	lump		R 84 000,00
	C1.4.5.2	Running costs	month	24		R -
C1.4.6		**Office staff**				
	C1.4.6.1	Secretary / receptionist	month	24		R -
	C1.4.6.2	Technical assistant	month	24		R -
C1.4.7		**Site inspection transport**				
	C1.4.7.1	Provision of a bus, mini-bus or combi van for site inspection purposes *(specify type and size of vehicle)*	per day	24		R -
	C1.4.7.2	Travel on site	kilometre (km)	60		R -
C1.4.8		**Site security measures for the Engineer's facilities**				
	C1.4.8.1	Supply and installation of all required security measures at the Engineer's site offices and laboratories	lump sum	lump		R 60 000,00
	C1.4.8.3	Supply and installation of all required security measures at the Engineer's site accommodation	lump sum	lump		R 60 000,00
	C1.4.8.6	Provision of an armed response service at the Engineer's rented accommodation *(5 HOUSES)*	month	24		R -
TOTAL CARRIED FORWARD TO SUMMARY						

ITEM				DESCRIPTION	UNIT	QTY	RATE	AMOUNT
				The applicable payment items required for the construction of temporary deviations shall be taken from the relevant chapters and sections in Chapters 1, 3, 5, 9 and 10 and inserted into the Pricing Schedule here. Each payment item for the construction of temporary deviations shall be preceded by the main payment item number C1.5.4 / followed by the payment number for the applicable payment item	kilometre (km)	35		R -
C1.5.5				**Maintenance of temporary deviations**				
	C1.5.5.1			Grass cutting	hectare (ha)	32		R -
	C1.5.5.2			Drain cleaning	kilometre (km)	40		R -
	C1.5.5.3			Cleaning out culverts	cubic metre (m^3)	500		R -
	C1.5.5.7			Base and/or surface patching using hot plant	tonne (t)			
	C1.5.5.8			Replacement of damaged guardrails	metre (m)	80		R -
	C1.5.5.9			Grading of temporary deviations and existing roads used as detours	kilometre (km)	80		R -
	C1.5.5.10			Watering of temporary deviations and existing	kilolitre (k*ℓ*)	20		R -
	C1.5.5.11			Other road maintenance work ordered by the Engineer	provisional sum	Prov	R 250 000,00	R 250 000,00
	C1.5.5.12			Handling cost, profit and all other charges in	percentage (%)	R 250 000,00		R -
C1.5.6				**Removal of temporary deviations**	kilometre (km)	80		R -
C1.5.7				**Temporary traffic control facilities**				
	C1.5.7.1			Delineators including mounting bases and ballast:				
		(a)		Single sided, reversible left or right *(size*	number (No.)	1320		R -
		(b)		Double sided, reversible left or right *(size*	number (No.)	2280		R -
	C1.5.7.2			Traffic cones, minimum height 750mm	number (No.)	380		R -
	C1.5.7.3			Flagmen	man-shift	12040		R -
	C1.5.7.4			Traffic controllers	man-shift	48		R -
	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:				
			(i)	900mm wide x 150mm high	number (No.)	2		R -
			(ii)	1200mm wide x 200mm high	number (No.)	2		R -
		(b)		Flashing LED illuminated arrow board	number (No.)	2		R -
		(c)		Illuminated road sign – R & TR series *(diameter indicated)*	number (No.)	39		R -
		(d)		Illuminated road sign – TW series *(length of sides indicated)*	number (No.)	39		R -
		(e)		Mobile variable message sign	number (No.)	2		R -
		(f)		Mobile variable message sign with a speed measuring and display capability	month	24		R -
	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		R -
		(b)		Flashing LED illuminated arrow board	month	24		R -
		(c)		Illuminated road sign – R & TR series *(diameter indicated)*	month	24		R -
		(d)		Illuminated road sign – TW series *(length of*	month	24		R -
		(e)		Mobile variable message sign	month	24		R -
		(f)		Mobile variable message sign with a speed	month	24		R -
	C1.5.7.7			Traffic calming devices:				
		(a)		25mm high x 100mm wide asphalt rumble strips	metre (m)	390		R -
		(b)		50mm high x 500m wide asphalt rumble strips	metre (m)	390		R -
		(c)		150mm high x 3m wide asphalt speed control	metre (m)	390		R -
	C1.5.7.8			Traffic control stations	month	24		R -
	C1.5.7.9			Cleaning of traffic control facilities	month	48		R -
C1.5.8				**Traffic safety officer**	man-month	48		R -
C1.5.9				**Traffic safety vehicle**	month	24		R -
C1.5.10				**Tow trucks**				
C1.5.11				**Provision of safety equipment for visitors**				
	C1.5.11.1			Provision of reflective safety vests for visitors	number (No.)	100		R -
	C1.5.11.2			Provision of hard hats for visitors	number (No.)	100		R -
C1.5.12				**Additional traffic accommodation facilities**				
	C1.5.12.1			Provision of additional traffic accommodation	provisional sum	Prov	R 10 000,00	R 10 000,00
	C1.5.12.2			Handling cost, profit and all other charges in	percentage (%)	R 10 000,00		R -
TOTAL CARRIED FORWARD TO SUMMARY								

C1.6		CLEARING AND GRUBBING				
ITEM		**DESCRIPTION**	**UNIT**	**QTY**	**RATE**	**AMOUNT**
C1.6.1		**Clearing**				
	C1.6.1.1	Clearing with machines and some hand labour where necessary	hectare (ha)	28		R -
C1.6.2		**Grubbing**				
	C1.6.2.1	Grubbing with machines and some hand labour where necessary	hectare (ha)	28		R -
	C1.6.10.1	Disposal of hazardous waste material at an approved hazardous waste material facility	provisional sum	Prov	R 50 000,00	R 50 000,00
	C1.6.10.2	Handling cost, profit and all other charges in	percentage (%)	R 50 000,00		R -
TOTAL CARRIED FORWARD TO SUMMARY						

C1.7 **LOADING AND HAULING**

ITEM		DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C1.7.1		**Loading**				
	C1.7.1.2	Loading from heaps or windrows using machines and/some hand labour where necessary	cubic metre (m^3)	10000		R -
C1.7.2		**Hauling**			R -	
	C1.7.2.1	**Hauling material for use in the Works and off-loading it on the site of the Works:**				
		Soil, gravel, crushed stone and pavement layer material	cubic metre - kilometre (m^3 - km)	150000		R -
		Soil and gravel material	cubic metre - kilometre (m^3 - km)	2760		R -
TOTAL CARRIED FORWARD TO SUMMARY						**R -**

C3.1 **DRAINS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C3.1.1			**Excavation for open drains:**				
	C3.1.1.1		Excavating all material situated within the following depth ranges below				
		(a)	0m to 1,5m	cubic metre (m^3)	1500		R -
		(b)	Exceeding 1,5m and up to 3,0m	cubic metre (m^3)	100		R -
		(c)	Etc. in increments of 1,5m	cubic metre (m^3)	75		R -
	C3.1.1.2		Extra over sub-item C3.1.1.1 for excavation in hard and boulder	cubic metre (m^3)	100		R -
	C3.1.1.3		Extra over sub-item C3.1.1.1 for excavation in stabilised existing road	cubic metre (m^3)	100		R -
	C3.1.1.4		Excavating soft material situated 0m to 1,5m below the surface level	cubic metre (m^3)	90		R -
	C3.1.1.5		Excavating intermediate material situated 0m to 1,5m below the surface	cubic metre (m^3)	90		R -
C3.1.2			**Clearing, shaping and disposal of accumulated sediment in existing unlined open drains**				
	C3.1.2.2		Using labour enhanced construction methods	cubic metre (m^3)	5000		R -
C3.1.3			**Excavation, clearing and disposal of accumulated sediment in existing lined drains and drainage systems**				
	C3.1.3.1		Using conventional methods (up to 1,5m):				
		(a)	Manholes and inlet and outlet structures	cubic metre (m^3)	100		R -
		(b)	Culvert barrels	cubic metre (m^3)	100		R -
C3.1.15			**Repairing or replacing existing drainage systems**	provisional sum	Prov	sum	R50 000,00
C3.1.24			**Submission of as built drawings by the Contractor**	provisional sum	Prov	sum	R 35 000,00
TOTAL CARRIED FORWARD TO SUMMARY							

C3.3 **CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, AS WELL AS CONCRETE, STONE PITCHED AND GABION LININGS FOR OPEN DRAINS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C3.3.1			**Concrete kerbing:**				
		(a)	As shown on drawing	metre (m)	300		R -
TOTAL CARRIED FORWARD TO SUMMARY							**R -**

C4.4 **COMMERCIAL MATERIALS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C4.4.2			**Commercial materials identified by the Contractor from commercial,**				
		(c)	Type G5A to a depth of 100mm to in situ reclycled with the existing base material.	cubic metre (m^3)	26600		R -
C4.4.4			**Cementitious stabilising agents**				
	C4.4.4.2		Cement	ton (t)	4400		R -
C4.4.7			**Sampling and material testing by a commercial laboratory for the stabilisation designs**				
	C4.4.7.1		Cost of sampling and material testing	provisional sum	Prov	800000	R 800 000,00
	C4.4.7.2		Handling cost and profit in respect of item C4.4.7.1	percentage (%)	R 800 000,00		R -
TOTAL CARRIED FORWARD TO SUMMARY							

C5.3 **ROAD PAVEMENT LAYERS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C5.3.1			**Compiling and implementing M&U plans for the construction of**	number (No.)	1		R -
C5.3.2			**Construction of pavement layers**				
		(h)	Gravel shoulder layer *(using G6 at 150mm depth)* compacted to 95% of MDD	cubic metre (m^3)	15750		R -
		(q)	G5A crushed rock/boulder subbase layer *(using G5A at 150mm depth)* compacted to 100% of MDD obtained commercially	cubic metre (m^3)	45000		R -
		(w)	G1 crushed stone base layer at 150mm depth compacted to 88% of BD obtained commercially	cubic metre (m^3)	42000		R -
	C5.3.10.2		PMPL layer	cubic metre (m^3)			Rate Only
	C5.3.10.3		Crushed stone layer	cubic metre (m^3)	240		R -
C5.3.11			**Riding quality measurements:**				
	C5.3.11.1		Using a 3,0m straight edge	kilometre (km)	40		R -
	C5.3.11.3		Using an inertial profilometer	kilometre (km)			Rate Only
C5.3.12			**Surface regularity payment adjustments**	provisional sum	Prov		R 5 000,00
TOTAL CARRIED FORWARD TO SUMMARY							

C5.4 **STABILISATION**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C5.4.2			**Chemical stabilisation:**				
	C5.4.2.1		Chemical stabilisation *(using a new G5A to a depth of 150mm)* of pavement layers *(to a C4 Subbase)*	cubic metre (m^3)	45000		R -
		(a)	Cement (for pavement layer)	ton (t)	4400		R -
C5.4.10			**Provision and application of water for curing**	kilolitre (kℓ)	20000		R -
C5.4.14			**Trial section for a chemically stabilised layer**	cubic metre (m^3)	240		R -
TOTAL CARRIED FORWARD TO SUMMARY							**R -**

C8.1 **PRIME COAT**

ITEM		DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C8.1.1		**Prime coat:**				
	C8.1.1.2	MC -30 cut-back bitumen	litre (ℓ)	218400		R -
C8.1.2		**Aggregate for blinding:**				
	C8.1.2.1	Natural sand	cubic metre (m^3)			Rate Only
	C8.1.2.2	Crusher sand	cubic metre (m^3)	6000		R -
C8.1.3		**Extra over item C8.1.1 for applying the prime coat accessible only to hand-held or light equipment**	litre (ℓ)	1350		R -
TOTAL CARRIED FORWARD TO SUMMARY						**R -**

C8.2 **COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C8.2.1			**Cover sprays, fog sprays and rejuvenation sprays**				
		(a)	Indicate dilution (Diluted 50% Emulsion 50% Water)	litre (ℓ)	133000		R -
TOTAL CARRIED FORWARD TO SUMMARY							**R -**

C9.1 **ASPHALT LAYERS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
C9.1.1			**Asphalt mix designs**					
	C9.1.1.1		Stone skeletal mixes:					
		(a)	Continuously graded base or surfacing *((40mm nominal thickness and A-E2 grade binder)*	lump sum	lump	2500000	R	2 500 000
C9.1.5			**Asphalt surfacing**					
	C9.1.5.1		New construction					
		(a)	Stone skeletal mix – continuously graded as defined ((40mm nominal thickness and A-E2 grade binder))	square metre (m^2)	1350		R	-
C9.1.6			**Extra over pay items C9.1.4.1 and C9.1.5.1 for**	ton (t)	10		R	-
	C9.1.9.1		By means of chip spreader	square metre (m^2)	1350		R	-
C9.1.13			**Coring of asphalt layers**					
	C9.1.13.1		100mm diameter	number (No.)	6		R	-
TOTAL CARRIED FORWARD TO SUMMARY								

C10.1 **GENERAL REQUIREMENTS FOR SURFACE TREATMENTS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
C10.1.3			**Multiple stone seals including a cover spray, if specified using:**					
	C10.1.3.1		20mm and 10mm aggregate *(using a hot applied type SE-1 homogeneous modified binder)*	square metre (m^2)	277000		R -	266000
C10.1.4			**Embargo period effects**					
	C10.1.4.1		Re-establishment of sealing team after embargo period	lump sum	lump		R -	
	C10.1.9.11		Precoating fluid *(Petrleum Based Products)*	litre (ℓ)	10000		R -	
C10.1.10			**Aggregate variation** *(state grade)* **:**					
	C10.1.10.3		10mm aggregate	cubic metre (m^3)	300		R -	
	C10.1.10.5		20mm aggregate	cubic metre (m^3)	300		R -	
	C10.1.11.3		Diluted Cationic spray-grade emulsion *(A 60% cationic spray-grade emulsion (diluted with 50% water) fog spray as final binder application)*	litre (ℓ)	212000		R -	212000
C10.1.16			**Addition of wetting agent:**					
C10.1.17			**Aggregate for blinding:**					
	C10.1.18.2		Crusher sand	cubic metre (m^3)	3000		R -	
C10.1.19			**Extra over item for work in areas inaccessible to mechanical equipment:**					
	C10.1.19.1		Single seals	square metre (m^2)			Rate Only	
	C10.1.19.2		Multiple stone seals	square metre (m^2)	5000		R -	
C10.1.26			**Trial sections for all seal types specified** *(See Section C10.1.3.1)*	lump sum	lump		R 300 000,00	
C10.1.27			**Provision of Performance Guarantee in respect of the Surfacing**	lump sum	lump		R -	
TOTAL CARRIED FORWARD TO SUMMARY								

C11.1 **PITCHING, STONEWORK, CAST IN SITU CONCRETE FOR PROTECTION AGAINST EROSION**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	C11.1.2.2		Grouted stone pitching with mortar	square metre (m^2)	300		R -
C11.1.6			**Concrete edge beams** *(class 30/19 concrete)*	cubic metre (m^3)	40		R -
C11.1.7			**Provision of approved herbicide and ant poison:**				
	C11.1.7.1		Provision of materials	prime cost (PC) sum	Prime	20000	R 20 000,00
	C11.1.7.2		Contractor's charges and profit added to the prime cost sum	percentage (%)	R 20 000,00		R -
TOTAL CARRIED FORWARD TO SUMMARY							

C11.3 **GUIDE BLOCKS AND KILOMETRE MARKERS**

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C11.3.3	**Kilometre markers mounted on concrete reinforced pipes** *(diameter to be specified)*	number (No.)	35		R -
TOTAL CARRIED FORWARD TO SUMMARY					**R -**

C11.5 **FENCING**

ITEM				DESCRIPTION	UNIT	QTY	RATE	AMOUNT
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 *(3.2 x 2.5mm high tensile grade single strand)*	kilometre (km)	80		R -
	C11.5.1.7			Standards *(1850 x 2.5 kg/m "Y" section complete with holes at 50 mm c/c)*	number (No.)	400		R -
	C11.5.1.8			Droppers *(1400 x 0.56 kg/m Ridgeback Pattern)*	number (No.)	3000		R -
			(i)	Steel stays and anchors *(2130 x 60 x 3mmmild steel tubing)*	number (No.)	50		R -
TOTAL CARRIED FORWARD TO SUMMARY								**R -**

C11.6 **ROAD SIGNS**

ITEM			DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C11.6.1			**Road signboards with painted or coloured semi-matt background. Symbols, lettering and borders in semi- matt black or in Class I retro-reflective material, where the sign board is constructed from:**				
	C11.6.1.3		**Prepainted galvanized steel plate: (chromadek or approved equivalent)**				
		(a)	Area 0 to 0,5 m^2	square metre (m^2)			Rate Only
		(b)	Area exceeding 0,5 m^2 but not 2,0 m^2	square metre (m^2)	50		R -
		(c)	1200mm size *(signboard material, background and symbol retro-reflective class indicated)*	number (No.)	55		R -
	C11.6.3.2		Timber *(diameter and type indicated)*	metre (m)	688		R -
C11.6.4			**Kilometre Markers**				
	C11.6.4.1		Kilometre markers on posts *(triangular concrete post (Class 25/13) embedded in 1200mm high x 450mm)*	number (No.)	39		R -
	C11.6.4.2		Replace marker boards on existing kilometre posts	square metre (m^2)	20		R -
C11.6.5			**Excavation and backfilling for road sign supports (not applicable to kilometre posts)**				
	C11.6.5.1		Excavating soft material and backfilling	cubic metre (m^3)			
	C11.6.5.2		Excavating soft or intermediate material and backfilling using labour enhanced construction methods	cubic metre (m^3)	10		R -
	C11.6.5.3		Extra over item C11.6.5.1 and C11.6.5.2 for cement-treated soil backfill	cubic metre (m^3)	5		R -
	C11.6.5.4		Extra over item C11.6.5.1 for hard material excavation	cubic metre (m^3)	5		R -
	C11.6.5.5		Imported backfill material from commercial sources	cubic metre (m^3)	6		R -
C11.6.6			**Dismantling, storing and re-erecting road signs with a surface area of:**				
	C11.6.6.1		Area 0 to 0.5 m^2	square metre (m^2)			Rate Only
	C11.6.6.2		Area exceeding 0,5 m^2 but not 2,0 m^2	square metre (m^2)	50		R -
	C11.6.6.3		Exceeding 2,0 m^2 but not 10 m^2	square metre (m^2)			Rate Only
	C11.6.6.4		Exceeding 10 m^2	square metre (m^2)			Rate Only
C11.6.7			**Dismantling and storing of road signs and overhead signs**				
	C11.6.8.3		Size 300 x 1200mm *(state post type and reflective material)*	number (No.)	70		R -
C11.6.9			**Installation of traffic signals**				
	C11.6.9.1		Specialist installation of traffic signals	prime cost (PC) sum	Prime		R -
	C11.6.9.2		Handling cost, profit and all other charges of sub item C11.6.9.1	percentage (%)	R -		R -
C11.6.10			**Disposing of road signs with a surface area of:**				
	C11.6.10.1		Area 0 to 0,5 m^2	square metre (m^2)	50		R -
	C11.6.10.2		Area exceeding 0,5 m^2 but not 2,0 m^2	square metre (m^2)	50		R -
	C11.6.10.3		Exceeding 2,0 m^2 but not 10 m^2	square metre (m^2)	50		R -
	C11.6.10.4		Exceeding 10 m^2	square metre (m^2)	50		R -
TOTAL CARRIED FORWARD TO SUMMARY							**R -**

C11.7 **ROAD MARKINGS AND ROAD STUDS**

ITEM		DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C11.7.1		**Road marking:**				
C11.7.2		**Retro-reflective road marking:**				
	C11.7.2.1	White lines broken or unbroken *(Retro-reflective road-marking paint at 150mm wide)*	kilometre (km)	35		R -
	C11.7.2.2	Yellow lines broken or unbroken *(Retro-reflective road-marking paint at 150mm wide)*	kilometre (km)	70		R -
	C11.7.2.3	Red lines broken or unbroken *(paint type and width of line indicated)*	kilometre (km)			Rate Only
	C11.7.2.4	White lettering and symbols *(Retro-reflective road-marking paint at 150mm wide)*	square metre (m^2)	150		R -
	C11.7.2.5	Yellow lettering and symbols *(Retro-reflective road-marking paint at 150mm wide)*	square metre (m^2)	205		R -
C11.7.5		**Variations in rate of application:**				
	C11.7.5.1	White paint	litre (ℓ)	200		R -
	C11.7.5.2	Yellow paint	litre (ℓ)	200		R -
C11.7.7		**Road studs**				
	C11.7.7.1	Permanent road studs compliant to SANS 1442 *(type & colours*	number (No.)			Rate Only
	C11.7.7.2	Permanent road studs compliant to SANS 1463 *(classification & colours stated)*	number (No.)	6000		R -
	C11.7.7.3	Temporary road studs compliant to SANS 1442 or 1463	number (No.)			Rate Only
	C11.7.7.4	Solar powered road studs *(No. of LED's & colours stated)*	number (No.)			Rate Only
	C11.7.7.5	Provision of temporary and permanent road studs	provisional sum	Prov		R -
C11.7.8		**Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)**	kilometre (km)	35		R -
C11.7.9		**Re-establishing the painting unit during the defects notification period and at other instances on instruction of the Engineer**	number (No.)	1		R -
TOTAL CARRIED FORWARD TO SUMMARY						**R -**

C11.9 **FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS**

ITEM		DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C11.9.1		**Finishing the road and road reserve:**				
C11.9.2	C11.9.1.2	Single carriageway road	kilometre (km)	35		R -
		Treatment of old roads and temporary deviations				
	C11.9.2.1	Conventional construction methods	kilometre (km)	35		R -
TOTAL CARRIED FORWARD TO SUMMARY						**R -**

C20.1 **TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP**

ITEM				DESCRIPTION	UNIT	QTY	RATE	AMOUNT
C20.1.1				**Special tests on elastomeric bearings** (150% vertical load and 150% shear distortion)	number (No.)			Rate Only
	C20.1.2.2			Employer's contribution to other special tests				
		(a)		… *(Specify test)*	prime cost (PC) sum	Prime	Cost	R 500 000,00
			(i)	Handling costs and profit in respect of item	percentage (%)	R 500 000,00		R -
C20.1.3				**Providing testing equipment:**				
	C20.1.3.1			Core drill	number (No.)	6	3 000,00	R 18 000,00
PC20.1.5				**Financial contribution for an independent site laboratory**	month	24	225 000,00	R 5 400 000,00
PC20.1.6				**Payment of independent site laboratory**	*Note to compiler: Add this pay item C20.1.6 if the site laboratory is to be paid by the contractor (See Clause C4.7 of the Site laboratory pro-forma document):*			
	C20.1.6.1			Direct payment by contractor	prime cost (PC) sum	Prime	Cost	R 1 000 000,00
		(a)		Handling cost and profit in respect of item	percentage (%)	R 1 000 000,00		R -
TOTAL CARRIED FORWARD TO SUMMARY								

SECTION D - D1000				TRAINING, COACHING, GUIDANCE, MENTORING AND ASSISTANCE				
ITEM			**DESCRIPTION**	**UNIT**	**QTY**	**RATE**	**AMOUNT**	
D10.01			**Target Group Participation**					
	(a)		Contract Participation Performance bonus	prime cost (PC) sum	Prime	Cost	R	200 000,00
D10.02			**Stakeholder and Community Liaison and Social Facilitation**					
	(a)		Cost of liaison, social facilitation and PLC support	prime cost (PC) sum	Prime	Cost	R	200 000,00
	(b)		Handling cost and profit in respect of sub-item D10.02(a)	percentage (%)	R 200 000,00		R	-
D10.03			**Tender Process for Targeted Enterprises**					
	(a)		Contractor's charge for the management and execution of the Targeted Enterprise					
		(i)	Procurement process for the totality of all tenders concluded for the appointment of Targeted Enterprise subcontractors of CIDB 1 and 2 contractor grading	number (No.)	5		R	-
		(ii)	Procurement process for the totality of all tenders concluded for the appointment of Targeted Enterprise subcontractors of CIDB 3 and 4 contractor grading	number (No.)	5		R	-
		(iii)	Procurement process for the totality of all tenders concluded for the appointment of Targeted Enterprise subcontractors of CIDB 5 and higher contractor grading	number (No.)	1		R	-
		(iv)	Procurement process for the totality of all tenders concluded for the appointment of Targeted Enterprise suppliers	number (No.)	1		R	-
	(b)		Targeted Enterprise Procurement Coordinator	month	2		R	-
D10.04			**Responsibilities of the Contractor towards Targeted Enterprises**					
	(a)		Contractor's establishment, management, management support, assistance, coaching, guidance, mentoring and supervision of Targeted Enterprises	month	24		R	-
	(b)		Targeted Enterprise Construction Manager	Person.Month	24		R	-
	(c)		Targeted Enterprise Site Supervisors	Person.Month	24		R	-
D10.05			**Construction Works by Targeted Enterprises**					
	(a)		Payments associated with the construction works carried out by Targeted Enterprise	provisional sum	Prov	Sum	R	100 000,00
	(b)		Handling costs and profit in respect of payment associated with sub-item D10.05(a)	percentage (%)	R 100 000,00		R	-
	(c)		Fluctuation between the main contractor's rates and that of the Targeted Enterprise	lump sum	lump	sum	R	15 000,00
	(d)		Preliminary and General Obligations of Targeted Enterprise sub-contractors	lump sum	lump	sum	R	150 000,00
D10.06			**Training, coaching, guidance, mentoring and assistance**					
	(a)		Training Costs					
		(i)	Accredited NQF training	provisional sum	Prov	Sum	R	100 000,00
		(ii)	Accredited generic skills training	provisional sum	Prov	Sum	R	75 000,00
		(iii)	Community skills training	provisional sum	Prov	Sum	R	50 000,00
		(iv)	Handling cost and profit in respect of subitems D10.06(a)(i), (ii) and (iii)	percentage (%)	R 225 000,00		R	-
	(b)		Student experiential training					
		(i)	Student stipends	prime cost (PC) sum	Prime	Cost	R	100 000,00
		(ii)	Provision of experiential training	Person.Month	48		R	-
	(c)		Other costs during training	provisional sum	Prov	Sum	R	25 000,00
	(d)		Training venue	lump sum	lump	sum	R	50 000,00
TOTAL CARRIED FORWARD TO SUMMARY								

C2.3 SUMMARY OF PRICING SCHEDULE	
FOR: SPECIAL MAINTENANCE OF ROAD BETWEEN LINDLEY AND PETRUSTEYN	**AMOUNT**
GENERAL	
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	
DRAINAGE	
C3.1 DRAINS	
C3.3 CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES,	
EARTHWORKS AND PAVEMENT LAYERS MATERIALS	
C4.4 COMMERCIAL MATERIALS	
EARTHWORKS AND PAVEMENT LAYERS CONSTRUCTION	
C5.3 ROAD PAVEMENT LAYERS	
C5.4 STABILISATION	
C5.5 RECONSTRUCTION OF PAVEMENT LAYERS	
PRETREATMENT AND REPAIR EXISTING LAYERS	
C8.1 PRIME COAT	
C8.2 COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS	
C9.1 ASPHALT LAYERS	
C10.1 GENERAL REQUIREMENTS FOR SURFACE TREATMENTS	
C11.1 PITCHING, STONEWORK, CAST IN SITU CONCRETE FOR PROTECTION AGAINST	
C11.3 GUIDE BLOCKS AND KILOMETRE MARKERS	
C11.4 ROAD RESTRAINT SYSTEMS	
C11.5 FENCING	
C11.6 ROAD SIGNS	
C11.7 ROAD MARKINGS AND ROAD STUDS	
C11.9 FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
QUALITY ASSURANCE	
C20.1 TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP	
SECTION D: STAKEHOLDER AND COMMUNITY LIAISON, AND TARGET LABOUR AND TARGETED ENTERPRISES UTILISATION AND DEVELOPMENT	
D1010 TRAINING, COACHING, GUIDANCE, MENTORING AND ASSISTANCE	
SUBTOTAL A	
Note to compiler: Insert the following if the contract works period exceeds 12 months. In addition, add a formula for the amount to be calculated automatically as 0.25% of the total tender amount:	
CONTRACT SKILLS DEVELOPMENT GOAL: 0.25% of Subtotal A	
SUBTOTAL B	
(Contingencies @5%)	
SUBTOTAL C	
CPA@ 6%	
SUBTOTAL D	
Disbursments @ 2%	
SUBTOTAL E	
VALUE ADDED TAX: 15% of Subtotal	
TOTAL CARRIED TO C.1.1.1 : FORM OF OFFER	
SIGNED BY TENDERER:	

THE SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN, BY THE DEPARTMENT OF POLICE, ROADS AND TRANSPORT, FOR A PERIOD OF 24 MONTHS

Part C3 Specification for the Work

TABLE OF CONTENTS **PAGE**

PART A : GENERAL		C3-5
PS3	EXTENT OF THE WORKS	C3-5
PS4	NATURE OF GROUND AND SUBSOIL CONDITIONS	C3-6
PS5	CONSTRUCTION AND MANAGEMENT REQUIREMENTS	C3-6
PS6	SITE FACILITIES	C3-7
PS7	REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC	C3-8
PS8	OCCUPATIONAL HEALTH AND SAFETY	C3-9
PART B: AMENDMENTS TO STANDARD SPECIFICATIONS		C3-5
B1.2	GENERAL REQUIREMENTS AND PROVISION	C3-5
B1.3	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONSUTHORITY FOR SIGNATORY	C3-5
B1.5	ACCOMMODATION OF TRAFFIC	C3-5
B4.1	BORROW MATERIALS	
B4.4	COMMERCIAL MATERIALS	
B5.3	ROAD PAVEMENT LAYERS	
B5.4	STABILISATION	
B8.1	PRIME COAT	
B8.2	COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS	
B9.1	ASPHALT LAYERS	

ADDITIONAL CONTRACTOR'S INFORMATION

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.

The contractor himself shall provide a suitable site for his camp and for accommodating his labourers.

MANAGEMENT OF THE ENVIRONMENT

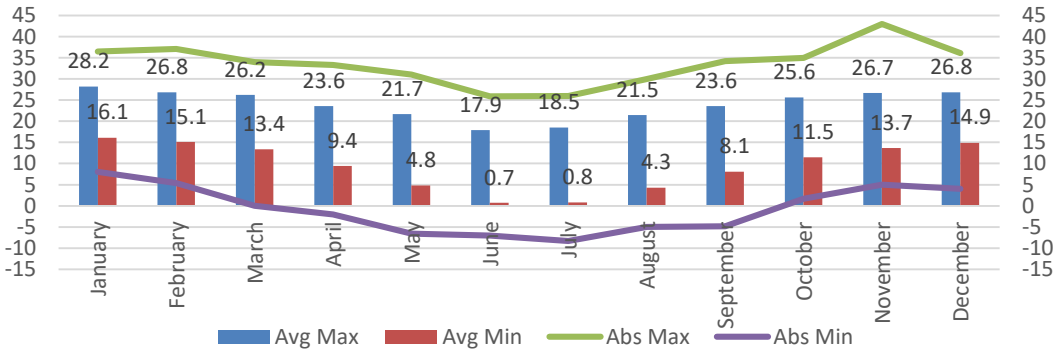
The contractor must take the utmost care to minimise the impact of his establishment and other construction activities on the environment and must adhere to the requirements as set out in Section C of the Scope of Works. Where the contractor fails to adhere to these requirements the specifications in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

SMME DEVELOPMENT TARGETS FOR THIS CONTRACT

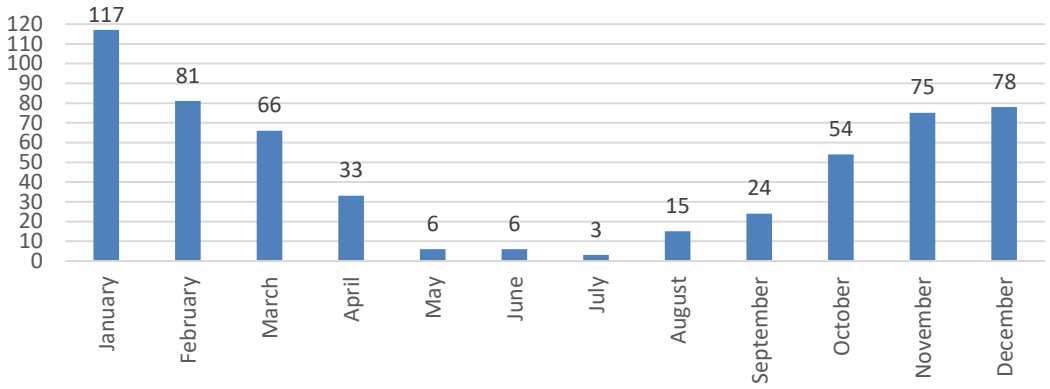
The successful tenderer will be required to allocate a minimum of 30% of the contract value as specified on **Schedule F**. Failure to achieve this target will lead to a breach of contract and could possibly be terminated.

CLIMATE

The average summer temperature of Petrusteyn is approximately minimum of 14°C and maximum of 26°C and its average winter temperature is approximately minimum 1°C and maximum 18°C. January is the hottest month with a temperature range of 28°C to 38°C, with frequent afternoon thunderstorms, while July is the coldest, with minimum temperatures that can be as low as -8°C. Snow is uncommon in the area. The chart below plots the average high and low temperatures for each month of the year for the project area.



Petrusteyn receives an average rainfall of between 500mm and 600mm annually. January is generally the wettest month and July is generally the driest month. The graph shows the rains distribution for Petrusteyn.



PS2 LOCATION OF THE WORKS

Refer to the locality plan included in Part C4 of this document.

PS3 EXTENT OF THE WORKS (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 this contract.

This section of the Project Document is a basic outline of the works, and does not limit the work to be carried out under this contract.

The works required under this contract consist of the following activities:

- **Site Establishment**
- **Accommodation of traffic**

  The road will be constructed in full-widths where possible. The by-passes and stop and go will be required for accommodation of traffic during construction where feasible.

- **Construction of pavement layers**

Table A5.3.5-2: Minimum compaction densities for crushed stone pavement layers

Layer	**Compaction as % Maximum Dry Density (MDD) or as % Bulk Density (BD) or as % Apparent Density (AD)**
G4A and G5A upper subbase layer	97 % of MDD for chemically stabilised layers
G1 base layer	88 % of AD for Road category A and B (TRH 4, Table 1 for road categories)

Extensive construction of pavement layers will be done, which will include the following:

1. Stabilize the existing surfaced road with CEM II cement to achieve C3 sub base at a depth of 150mm.
2. Import G1 crushed material within the specification to construct a 150mm base layer compacted to 88% AD

- **Resurfacing**

Surfacing of this road will be by a 20/10mm double seal stone aggregates.

- Clearing out of existing hydraulic structures
- Re-raising of the existing culvert's wing walls and head walls
- Re-installation of subsurface draining systems
- Construction of erosion protection (gabions/stone pitching)
- Road markings
- Road signs
- Fencing repairs
- Installation of guardrails
- Refurbishment of existing steel and concrete structure

MAINTENANCE WORKS

- The Free State Department of Police, Roads & Transport has currently no maintenance contracts on this section of road, therefore the appointed contractor is liable for the safe keeping of the road while under the contract.

PS4 NATURE OF GROUND AND SUBSOIL CONDITIONS

Ground and subsoil will be installed at the identified sites / areas.

PS5 CONSTRUCTION AND MANAGEMENT REQUIREMENTS

PS5.1 Quality Assurance (QA)

The Contractor will be solely responsible for the production of work that complies with the Specifications. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site.

The Engineer (Client representative) will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the Contractor's own control is sufficient to identify any possible quality problems, which could cause a delay or failure.

With the nature of this project not including services of consultants, the contractors Quality Assurance system is to include and accommodate the employer’s quality assurance/acceptance systems.

PS5.2 Management and disposal of water and surplus material

The Contractor shall pay special attention to the management and disposal of water and storm water on the site. It is essential that all completed works or parts thereof are kept dry and properly drained.

Claims for delay and for repair of damage caused to the works as a result of the Contractor’s failure to properly manage rain and surface water, will not be considered.

The Contractor shall dispose of all excess or unsuitable material at approved spoil sites.

The Contractor shall be responsible for all arrangements necessary to obtain such spoil sites.

PS5.3 Management of the environment

The Contractor shall pay special attention to the following:

(a) Natural vegetation

The Contractor shall confine his operation to as small an area of the site as may be practical for the purpose of constructing the works.

Only those trees and shrubs directly affected by the works and such others as the Engineer may direct in writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer. All indigenous plant obstructing the construction should be transplanted with an advice of the Environmentalist.

(b) Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

PS6 SITE FACILITIES

PS6.1 Contractor's camp site office and depot

The Contractor is responsible for providing a suitable site for the contract site office and to provide accommodation for his personnel and labourers.

Prior to establishment, the Contractor must obtain the approval of and a permission from the Nketoana Local Municipality regarding the site office. He / She can also engage with any local farmer for site offices with the area of works.

PS6.2 Accommodation of employees

No employees, except for security guards, will be allowed to sleep or be accommodated on the site.

No housing is available for the Contractor's employees and the Contractor shall make his own arrangements to house his employees and to transport them to site.

No informal housing or squatting will be allowed including camps.

The Contractor shall provide the necessary ablution facilities at his camp site and the site of the works for the use of his employees. Only chemical toilets will be allowed where temporary facilities have to be provided.

PS6.3 Power supply, water and other services

The Contractor shall make his own arrangements concerning the provision of electrical power, water and all other services at the site office. No direct payment will be made for the provision of electricity, water and other services.

The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required, or in the Contractor's Preliminary and General items as the case may be.

PS6.4 Security

The Contractor shall provide local security watchmen for the contract as he deems fit at no extra cost for the Employer. The Contractor must ensure that all his employees as well as the employees of his subcontractors are able to identify themselves as members of the construction team.

PS7 REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC

PS7.1 General

The Contractor will be responsible for the safe and easy passage of public traffic next to or adjacent to the construction site.

PS7.2 Basic requirements

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

The Contractor shall ensure that all road signs, barricades, traffic lights, delineators, flagmen and speed control measures are effective and that courtesy is extended to the public at all times.

Failure to maintain road signs, warning signs, traffic lights or flashing lights, etc. in a good condition shall constitute ample reason for the Engineer to suspend the work until the road signs, etc. have been reinstituted to specification.

The Contractor may not commence constructional activities affecting existing roads before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.

The Contractor shall provide and grant access to persons whose properties fall within or adjoin the area in which he is working.

PS7.3 Traffic Safety Officer

The Contractor shall appoint a suitable traffic safety officer to be responsible for the arrangement and maintenance of all the measures for the accommodation of traffic for the duration of the project. Duties of the traffic safety officer shall be as set out in Section 1.5 and shall also be in compliance with the Occupational Health and Safety Act 1993 and the Construction Regulations 2014.

PS8 OCCUPATIONAL HEALTH AND SAFETY

PS8.1 General Statement

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his a

To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2014 issued on February 2014 by the Department of Labour and the COVID 19 Occupational Health and Safety Measures in Workplaces COVID 19 (C19 OHS), 2020, issued by the Employment and Department of Labour.

PS8.2 Health and Safety Specifications and Plans

(a) Employer's Health and Safety Specification

The Employer's Health and Safety Specification will be included in the tender documents as part of the Particular Specifications. (Included in Section C3.3)

(b) Bidder's Health and Safety Plan

The Contractor shall submit within 14 days after the commencement date his own documented Health and Safety Plan he proposes to implement for the execution of the work under the contract. His Health and Safety Plan must at least cover the following:

i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 7 to 28;
ii) pro-active identification of potential hazards and unsafe working conditions;
iii) provision of a safe working environment and equipment;
iv) statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 5)*;
v) monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
vi) details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 6 and other applicable regulations; and
vii) detail of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2003.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or his agent, amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

Note: Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan and construction permit shall not be used as a reason to claim for extension of time or standing time and related costs.

PS8.3 Cost of compliance with the OHS Act and Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract.

Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

PART B: MATTERS RELATING TO THE STANDARD SPECIFICATIONS

C3.2 Specification for the Work

Notes to tenderer:

1. In certain clauses the Standard Specifications allow a choice to be specified in the 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 part of the project specifications.

   It also contains some additional specifications required for this particular contract.

2. The number of each clause and each payment item in this part of the project specifications consists of the prefix B followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications.

   The number of a new clause or a new payment item which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by B followed by a new number.

   The new numbers follow on the last clause or item number used in the relevant section of the standard specifications.

   All materials shall comply with the specifications as set out in the COTO Standard Specifications for Road and Bridge Works for State Road Authorities October 2020.

B1.2.7.1 PROGRAMME OF WORK / EXECUTION OF THE WORKS

Add the following after the title:

"The Contractor shall include with his tender a preliminary programme. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to adverse weather conditions and special non-working days as specified in the Project Specifications and in the Contract Data.

It is essential that the construction programme, which shall conform in all respects to Clause 5(6) of the General Conditions of Contract, be furnished within the time stated in the Contract

Data. The preliminary programme to be submitted with the tender shall be used as basis for this programme."

(a) General

Insert the following at the beginning of the clause:

"The Contractor shall submit his programme at the closing of the tender together with his billed tender document. The programme shall be in the form of a bar chart (Gantt chart) or any other time-activity form acceptable to the Engineer, and shall clearly show:

i) The proposed rate of progress in order to complete the works within the required period as tendered, showing the various activities, their durations and proposed resourcing levels (major plant and labour) for each element of the works. Sufficient detail shall be provided to enable the Engineer to be able to gauge construction progress. All activities, including establishment on site, trimming and finishing and the completion of all minor ancillary works are to be included in the programme.

ii) The sequence of activities and any dependencies (time or resource related) between them.

iii) The critical path activities.

iv) Key dates in respect of work to be carried out, or information, etc., to be provided, by others.

v) Other information specifically required by the Engineer.

When compiling his programme, the Contractor shall, inter alia, take into consideration and make allowance for:

i) Unexpected weather conditions and their effects.

ii) Known physical conditions or artificial obstructions.

iii) The accommodation and safeguarding of public traffic.

iv) Restrictions of the total length of deviation open to traffic at any one time. Simultaneous work on adjacent sections shall not be allowed.

v) All special non-working days as defined in Part C1.2: Contract Data.

vi) All training, especially safety training, to be completed before an activity is commenced.

The following details shall be submitted together with the programme:

i) The number of working hours per day, working days per week, assumed holiday, builders break or shut down periods on which the programme is based.

ii) The overall labour and major plant resource levels on which the programme is based.

iii) The detailed traffic accommodation proposals on which the programme is based (road or lane closures, by-passes, lengths of sections to be worked, timing etc).

iv) A budget forecast of the value of completed work, excluding CPA and contingencies but including VAT, month by month, for the full contract period.

These additional items shall also be revised when any revision is made to the programme. Failure to comply with these requirements entitles the Engineer to use a programme based on his own assumptions to evaluate claims for extension of time for completion of the works, or for additional compensation.

Minor revisions to the approved programme may be introduced from time to time by mutual agreement between the Contractor and the Engineer. Should the Engineer believe that a major revision of the programme is required, the Contractor will be notified in writing and an updated programme shall be submitted within two weeks of receipt of such notification.

It should be noted that it is in the Contractor's interest to provide a comprehensive programme giving as much information as possible about the times allowed for the various activities as well as resource or other limitations affecting the programme, since the approved programme may be used to evaluate any claims in terms of the General Conditions of Contract for extension of time.

The Contractor shall submit to the Engineer, at least three working days before each monthly site meeting, copies of the following:

i) The contract programme with progress charts and programme graphs updated to reflect the actual progress to date.

ii) A summary of progress on site over the month preceding the site meeting. The report shall be in the form of a detailed narrative to the contract programme.

iii) Details of activities running late, indicating what steps have been or will be taken to ensure that the work is completed within the specified time.

iv) A report on all labour, plant and materials on site.

v) All other appendices to the monthly site meeting minutes as required by the Employer."

BA 1.2.7.2 THE SETTING OUT OF WORK AND PROTECTION OF BEACONS (where required)

Add the following before the last paragraph:

"The sections to be rehabilitated or constructed have not been set out.

Benchmarks required for construction control shall be established by the Contractor. The Contractor shall survey the existing benchmarks and submit the results for checking and approval by the Engineer within 14 days after the Commencement date.

Where instructed by the Engineer, the Contractor shall stake the road at 20m point intervals along the road before the start of any construction activities. Cross sections shall be taken to the width of the road reserve, indicated by the existing fence line or as prescribed by the Engineer either side of the road Centre line at the 20m point intervals. The cross sections have to be submitted to the Engineer for checking and approval in the format required by the Engineer (including electronic format).

The Contractor shall submit written notice to the Engineer in the form of "job requests" of at least three working days before the intention of setting out or commencing any portion of the Works especially if the Works are to be checked. Such notice shall include the time, location and type of Work to be set out or checked. The Contractor shall complete setting out or surveying any part of the works ahead of his submitted construction programme to allow the Engineer adequate time to check the setting out or the survey and to give his approval to proceed or give instructions for alterations, additions and omissions."

Add the following before the first sentence of the last paragraph:

"No separate payment will be made for any setting-out, staking, taking cross sections, checking benchmarks, referencing existing road markings or any work described in this clause."

Add the following paragraph:

"The Contractor shall take care that property beacons, trigonometrical survey beacons or setting-out beacons are not displaced or destroyed without the consent of the Engineer. Property beacons and trigonometrical survey beacons that have been displaced or destroyed shall be replaced by a registered Land Surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the contract without the consent of the Engineer shall be the Contractor's responsibility and included in the tender rates."

B1.2.8 WORKMANSHIP AND QUALITY CONTROL

Add the following after the title:

"The Contractor shall implement a (quality management systems) QMS in accordance with ISO 9001 and appoint a quality manager who shall ensure that members of the Contractor's staff comply with the requirements of the quality system. The quality system and the methods used to implement it shall be described in a quality plan produced by the Contractor. The quality manager shall be resident on site full time. No construction activities shall take place on site before the Engineer approves the quality plan".

a) Process control

The Contractor shall arrange for all tests required for process control to be done by a laboratory acceptable to and approved by the Engineer.

The Contractor may establish his own laboratory on site or he may employ the services of an independent commercial laboratory. The costs for these tests shall be deemed to be included in the relevant rates and no additional payment will be made for testing as required.

Add the following:

"The Contractor shall submit the quality assurance system he proposes using to the Engineer, for his approval, within two weeks of the site handover. Once accepted by the Engineer the Contractor shall not deviate from it unless written notification of proposed changes have similarly been submitted and approved. The system shall record the lines and levels of responsibility and indicate the method by which testing procedures will be conducted.

b) Acceptance control

add the following:

'*The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Engineer for acceptance control'*.

However, before accepting any work, the Engineer may have further control tests carried out by a laboratory of his choice. The cost of such additional tests will be covered by a Provisional Sum provided under Section 20 in the Bill of Quantities, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

An acceptance control system will be set up by the Engineer (Employer), which will include scheduled checks of the contractor's quality control system by means of various schedules to be submitted in a weekly and/or in a monthly basis.

The schedules will include but not limited to the following:

- Quality acceptance control testing
- Electronic Daily Diaries which include photographic evidence of work done submitted on a daily basis.
- Hard copy daily diaries prepared for signing on a weekly or bi-weekly basis.
- Inspection requests forms must be submitted electronically and backed up with hard copies for signing on site. (Requests to be submitted 24hr in advance)
- Monthly labour and Progress reports."

Add the following:

"The Contractor's place of testing and laboratories shall be subject to inspection and approval by the Engineer.

No routine levelling or material testing will be executed by the Engineer on behalf of the Contractor. The Engineer will only check the levels and laboratory test results of the Contractor after the information has been submitted to him in writing. The Engineer may however perform acceptance control testing.

No work executed will be measured for payment unless the results submitted have been checked and approved."

B1.2.8.2 ACCEPTANCE QUALITY CONTROL

Remove the second, third and fourth sentences and replace with the following:

The engineer may carry out testing at the cost of the Employer in either the Engineer's laboratory or one approved by him.

An acceptance control system will be set up by the Engineer (Employer), which will include scheduled checks of the contractor's quality control system by means of various schedules to be submitted in a weekly and/or in a monthly basis.

The schedules will include but not limited to the following:

- Quality acceptance control testing
- Electronic Daily Diaries which include photographic evidence of work done submitted on a daily basis.
- Hard copy daily diaries prepared for signing on a weekly or bi-weekly basis.
- Inspection requests submitted electronically and backed up with hard copies for signing on site. (Requests to be submitted 24hr in advance)
- Monthly labour and Progress reports.

BA1.2.8.3 CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS

Notwithstanding that there might be natural or programmed sections of the works that will result in them being completed in their entirety before other sections, no consideration shall be given to the issuing of practical completion certificates for portions of the works. The use of any completed roadway or portions of the work, whether for unhindered use by the public or for accommodation of traffic while other portions are being constructed, shall not constitute use or occupation by the Employer.

In addition to the listed specified items of work and regardless of the degree of beneficial occupation by the Employer, the works shall be considered for practical completion only if the following criteria also have been met:

i) The estimated cost to complete the outstanding work is less than 2% of the tendered value of work plus the cost of any variation or extra work orders, but excluding CPA and VAT.

ii) The written list of outstanding items of work can be completed within 28 days of the list having been accepted in writing by the Contractor.

iii) Any information in the Contractor's possession, which is required by the Engineer and has been requested in writing, has been supplied.

iv) All road work and storm water drainages have been completed in accordance with the project specification.

iiv) The road can be fully utilized by the public with a minor destruction.

The contents of this General Conditions of Contracts, together with the above amendment, shall be applied equally to the issue of a Certificate of Practical Completion.

BA.1.2.8.4 INFORMATION FURNISHED BY THE EMPLOYER

Add the following new clause:

"Quantities regarding the distribution and extent of repair work items were compiled and calculated to the best of the Engineer's knowledge and available information at the time of the design and could be subject to significant variations at the construction stage. Such variations shall, however, not form grounds for a claim by the Contractor in terms of the General Conditions of Contract."

BA 1.2.3.4 EXTENSION OF TIME FOR DELAYS CAUSED BY RAINFALL

Change the existing heading of clause BA 1.2.3.4 to read as above and wherever the expression "rainfall" is encountered replace it with "inclement weather"

Delete the entire clause and replace with the following:

"For the purposes of calculating an extension of time due to climatic conditions in terms of clause 5(12)(2) of the General Conditions of Contract, the number of days more than the number of working days anticipated to be lost due to climatic conditions shown in Table B1215/1 shall be taken into account:

TABLE B1215/1

ANTICIPATED DAYS LOST DUE TO INCLEMENT WEATHER CONDITIONS

EXPECTED NUMBER OF WORKING DAYS LOST			
January	4	July	3
February	5	August	3
March	3	September	3
April	3	October	3
May	3	November	3
June	3	December	4

The following climatic conditions can be classified as inclement weather conditions:

- Cold weather conditions,
- Windy conditions,
- Misty conditions,
- Excessive dust storms, and
- Rainy conditions (more than 10 mm rain per day).

The Engineer will certify a day lost due to the above climatic conditions or inclement weather conditions only if:

(a) no work on the critical path (delay in critical path) according to the latest approved programme for completion of the works could be carried out during that specific working day or if

(b) only 30% or less of the work force and plant planned for that specific day, could work.

(c) Consequential delays as a results of wet/damped section of the works

The extension of time as a result of inclement weather and/or abnormal climatic conditions will be calculated monthly as being equal to the absolute value of the number of days certified by the Engineer as lost due to climatic conditions, less the number of days in Table B1215/1. The total extension of time for the contract will be the sum of the monthly extensions.

Extension of time for portions of a month shall be calculated *pro-rata*.

If approved extensions of time extend the completion date beyond the start of the Contractor's holiday in December, the holiday period shall not be considered as working days, as defined in the Contract Data. Any remaining extension of time at this date shall be calculated from the first statutory working day in January the following year, provided that the contractor has shown in his programme that he intends to close during the traditional Christmas / New Year break."

BA1.2.3.5 HANDING-OVER OF THE SITE OF THE WORKS

Add the following:

"Upon the handing-over of the site the Contractor shall immediately assume responsibility for the application of the Construction Permit and start with all related road works within the limits of this contract as set out in the specifications.

Prior to the commencement of works the Contractor and the Engineer shall together carry out a joint inspection of the road section. During such an inspection, notes shall be made of all damaged fences, guardrails, signs and any other notable problems or features that exist at the time of hand-over. The following matters should be agreed at the time of handing-over:

i) The limits, lengths, widths and areas of construction.

ii) The location of kilometer markers and reference beacons

iii) The location of stockpile areas and the responsibilities of the Contractor with regard to the road reserve area and the stockpile sites (fencing, re-establishment, height of stockpile, etc.).

iv) The method of accommodation of public traffic with regard to safety, sight distances, interference with existing road signs and road markings both within the work area and providing advance warning before the work area.

v) The method of construction and supervisory control measures."

BA1.2.3.7LEGAL AND CONTRACTUAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC AND THE EMPLOYER

Add the following new paragraph:

"The Contractor shall take note of the new Construction Regulations 2003 recently promulgated under the Occupational Health and Safety Act (Act 85 of 1993) and it's Regulations, in particular the Construction Regulations 2017 No. R. 1010 promulgated 18 July 2003 as well as the COVID 19 Occupational Health and Safety Measures in Workplaces COVID 19 (C19 OHS), 2020, issued by the Department of Employment and Labour. The Contractor shall in terms of sub clause 5(1) of these regulations provide a comprehensive health and safety plan detailing the hazards identified on this project and the procedures required to mitigate, reduce and/or control the said hazards.

The scope of the work to be carried out under this contract is indicated, but not limited to, this section and in other sections of this document and on the drawings and shall include the health and safety specification as well as COVID 19 OHS Specifications.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as the Construction Regulations. Failure to adhere to the approved specifications and compliance, will lead to penalties".

BA 1.2.3.10 NOTICES, SIGNS AND ADVERTISEMENTS

Delete the last sentence and replace with the following:

"All signboards erected in accordance with the drawings or as approved advertisements for the Contractor's establishment, shall be removed at the same time as the de-establishment of the Contractor's camp. Payment under sub-item 13.01 for the final installment of 15% of the tendered lump sum shall not be made unless all the advertisements, notices and temporary signs have been removed."

C1.2 GENERAL REQUIREMENTS AND PROVISIONS

PART C: MEASRUREMENT AND PAYMENT

Add the following new payment items:

ITEM **UNIT**

BC1.2.10 Protection, removal, realignment and replacement of services

a) Utility Services

b) Contractor's handling cost and profit in respect of Percentage (%)

sub-item B1.2.01(a)(i)(ii)(iii)

The prime cost item shall be paid in accordance with the provisions of the General Conditions of Contract.

The tendered percentage is a percentage of the amount actually spent under the prime-cost item, which shall include full compensation for the profit in connection with providing the specified service."

ITEM			**UNIT**
BC1.2.11	**(i)**	Laboratory tests for Engineer's quality assurance acceptance control ……...**Provisional (Prov. Sum)**	
BC1.2.11	**(ii)**	Contractor's handling cost and profit in respect of sub-item BC1.2.11(i) ……**Percentage (%)**	

Quality assurance control testing will be carried out by an external laboratory as nominated by the Engineer.

Any payment claimed under this provisional sum item shall be certified on the engineer's receipt of the Contractor's submitted tax invoice(s) as received from the Engineer's selected external laboratory. No payment will be considered without an attached associated tax invoice.

The tendered percentage is a percentage of the amount actually spent under the provisional sum item, for the Contractor's handling cost and profit in respect of sub-item B1.2.11(i)."

ITEM			**UNIT**
BC1.2.12	**(i)**	**Site Surveyor** for Engineer's quality Assurance/ acceptance control ……...**Provisional (Prov. Sum)**	
BC1.2.12	**(ii)**	Contractor's handling cost and profit in respect of sub-item BC1.2.12(i) ……**Percentage (%)**	

Quality assurance control testing will be carried out by an external laboratory as nominated by the Engineer.

Any payment claimed under this provisional sum item shall be certified on the engineer's receipt of the Contractor's submitted tax invoice(s) as received from the Engineer's selected external laboratory. No payment will be considered without an attached associated tax invoice.

The tendered percentage is a percentage of the amount actually spent under the provisional sum item, for the Contractor's handling cost and profit in respect of sub-item B1.2.12(i)."

ITEM **UNIT**

BC1.2.13 (i) **Occupational Health and Safety Agent** for Engineer's quality Assurance/ acceptance control ……...**Provisional (Prov. Sum)**

BC1.2.13 (ii) Contractor's handling cost and profit in respect of sub-item BC1.2.13(i) ……**Percentage (%)**

Quality assurance site inspection will be carried out by an external OHS agent as nominated by the Engineer/Employer.

Any payment claimed under this provisional sum item shall be certified on the engineer's receipt of the Contractor's submitted tax invoice(s) as received from the Employer's /Engineer's selected OHS agent. No payment will be considered without an attached associated tax invoice.

The tendered percentage is a percentage of the amount actually spent under the provisional sum item, for the Contractor's handling cost and profit in respect of sub-item B1.2.13(i)."

ITEM **UNIT**

BC1.2.14 (i) **Environmental Compliance Agent** for Engineer's quality Assurance/ acceptance control ……...**Provisional (Prov. Sum)**

BC1.2.14 (ii) Contractor's handling cost and profit in respect of sub-item BC1.2.14(i) ……**Percentage (%)**

Quality assurance site inspection will be carried out by an external Environmentalist as nominated by the Engineer/ Employer.

Any payment claimed under this provisional sum item shall be certified on the engineer's receipt of the Contractor's submitted tax invoice(s) as received from the Engineer's selected external environmentalist. No payment will be considered without an attached associated tax invoice.

The tendered percentage is a percentage of the amount actually spent under the provisional sum item, for the Contractor's handling cost and profit in respect of sub-item B1.2.14(i)."

ITEM **UNIT**

BC1.2.15 **(i) Portion** of the Works identified by the Employer or Engineer to be completed by Local Subcontractors ....Provisional(Prov. Sum)

BC1.2.15 **(ii)** Contractor's handling cost and profit in respect of sub-item BC1.2.15(i) allowed for the Main Contractor's interaction with local subcontractors as well as facilitation of monthly payments to the nominated subcontractor for works completed under this pay item……...Percentage (%)

The local subcontractor will submit an itemised claim and an associated invoice to the Contractor. Payment under Item BC1.2.15 (ii) will be considered upon the submission of a claim by the Main Contractor to the Engineer.

Note: Implementation of all subcontracting program will be done in-line with PART C4 of the project specification, which looks into the procurement, appointment and payment of all local subcontractors appointed in the contract.

SECTION A1.3: CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

BA1.3 GENERAL REQUIREMENTS

Add the following new clause:

A1.3.9 Legal and contractual requirements and responsibilities to the public

There has been recent legislation promulgated by Government that improves mutual obligations on the Employer and Contractor in the performance of their duties to society and to the built and natural environment.

To assist the Contractor in understanding and assessing his obligations, and thus to make allowances for the cost of compliance with this legislation, the following additional specifications are included in the Project Specifications, C3.3:

- **Section D: Particular Specification** contains the specification that regulates the Contractor's construction methods so far as to ensure the health and safety of his employees and of the public.
  A new pay item has been made available under this section to allow the Contractor to make separate provision for the cost of health and safety measures during the construction process.
- **Section E: Particular Specification** contains the Environmental Management Programme for this project. Its provisions regulate the Contractor's construction methods to ensure responsible conduct and treatment of the environment relevant to the project. No separate payment mechanism has been made available for the Contractor to allow for his compliance with relevant environmental legislation. The Contractor shall include such

costs in the existing payment items under section 1.2 Payment. However, non-compliance with the provisions of this section may lead to the imposition of penalties.

- **Section G: Particular Specification** contains guidelines for sub-contracting and labour enhancement.

BC 1.3.1 PAYMENT ITEM UNIT

BC1.3.1 The Contractor's general obligations

Add the following payment sub-item:

"BC1.3.1.4) Health and safety obligation ……**month"**

Add the following paragraphs after the as paragraphs

Payment for time related costs arising from extensions of time granted by the Employer, where the Contractor is fairly entitled to such compensation in terms of the Conditions of Contract, will be calculated by taking account only of pay items for which the unit of measurement is "month". All pay items for which the unit of measurement is "month" are deemed to be based on 22 working days per month. Account shall be taken of all time related items scheduled in Section 1.3, 1.4 and 1.5."

Should the combined total tendered for sub items (C1.3.1.1) and (C1.3.1.3) exceed 15% of the tender sum (excluding CPA, contingencies and VAT), the Tenderer shall state his reasons in writing for tendering in this manner.

The Tenderer's attention is drawn to **Form I: Amendments, Qualifications and Alternatives** (to be completed by the Tenderer). If the Tenderer should require additional compensation for his obligations under section 1.3 (over and above the total tendered for item B1.3.1) by including such additional compensation in the tendered rates and/or lump sum of items in the Bill of Quantities, these items and the value of such additional compensation shall also be indicated in writing in a letter attached to Form I.

Payment of the rate per month for sub-item (1.3.1.4) shall include full compensation for all the Contractor's obligations relevant to health and safety legislation and all safety requirements.

A Contractor who tenders zero for this pay item shall not be relieved of his statutory obligations. A nil rate offered shall be deemed not as an omission but as deliberate notice that costs have been included in the tendered rates for individual items of work or in the other Preliminary and General pay items.

SECTION 1.5: ACCOMMODATION OF TRAFFIC

BA1.5.1 SCOPE

Add the following to the end of this clause:

"It is a condition of this contract that traffic is accommodated taking into account the provisions of the latest edition of the South African Road Traffic Signs Manual (SARTSM). The latest version for use in the

accommodation of traffic is Volume 2, Chapter 13 of the June 1999 edition. Copies of this publication are available from the South African National Roads Agency Limited, P O Box 415, Pretoria 0001.

BA1.5.3.2 GENERAL REQUIREMENTS

Add the following after the last paragraph:

Failure to maintain road signs, warning signs or flicker lights, etc. in a good condition shall constitute ample reason for the Engineer to stop the works until the road signs, etc. have been repaired and are operating to his satisfaction.

The Contractor shall not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of the drawings, specifications and the South African Road Traffic Signs Manual.

The Contractor is to supply, erect, operate and maintain all the road signs and other equipment shown on the drawings or in the specifications or as directed by the Engineer, necessary to safely carry out his traffic control responsibilities.

The Engineer may instruct the Contractor to carry out minor works at isolated positions outside the limits of the site. The Contractor shall be responsible for the safety of the traveling public at those positions during the contract period.

BA1.5.7.12 Traffic Safety Officer

Add the following to the end:

“The Contractor shall submit a CV of the candidate to the Engineer for approval before the candidate is appointed as the Traffic Safety Officer”.

BA1.5.6.1 TEMPORARY TRAFFIC-CONTROL FACILITIES

C,D,E) Temporary signs, Traffic Cones and traffic signals

Add the following after the last paragraph:

“The Contractor shall be responsible for the protection and maintenance of all signs and barricades and shall at his own cost replace any that have been damaged, lost, or stolen.

All temporary road signs required to remain in position for some time shall be pole mounted as shown on the drawings. The covering of permanent road signs, if applicable, shall be by utilizing a Hessian bag that shall be pulled over the sign in the form of a hood and fastened to the signposts.

Plastic bags or other materials and fastened by means of adhesive tape shall not be permitted.

BA 1.5.6.2 ILLUMINATED TRAFFIC SIGNS AND SAFETY DEVICES

Delete the specification and replace with the following:

"The Engineer has the authority and responsibility to enforce compliance with the approved Accommodation of Traffic Plan as submitted by the Contractor and approved for execution by the Engineer.

i) Vehicle mounted flashing lights

All construction vehicles and plant used on the works, including vehicles and plant operated by subcontractors and/or suppliers, shall be equipped with rotating amber flashing lights and warning signs as prescribed by law.

Rotating lights shall have an amber lens of minimum height of 200 mm and shall be mounted in such a way as to be highly visible from all directions. The lights on construction vehicles shall always be switched on while vehicles are being operated. All LDV's and cars operating on site shall also be equipped with rotating amber flashing lights which shall be placed so as to be highly visible and operated continuously while the vehicles are maneuvering in or out of traffic or are travelling or parked alongside roads open to public traffic.

Rotating lights and the "CONSTRUCTION VEHICLE" signs on the Contractor's vehicles and plant shall not be paid for separately but shall be included in the rates covering the use of the vehicles.

The Contractor shall supply and maintain rotating amber lights together with temporary mounting brackets to the Engineer and supervisory personnel for the duration of the contract period.

Vehicles and plant that do not comply with these requirements shall be removed from the site.

ii) Sign mounted flashing lights

Two amber flashing lights shall be vertically mounted on top of the traffic signs at each end of each traffic accommodation section as shown on the drawings. The lights shall be operated during the hours of darkness when in operation."

BA1.5.6.5 FLAGMEN

During the daytime, at least two flagmen shall be provided at each traffic control point in addition to the traffic signal operator, one flagman at the 80 km/h sign and a second roving flagman to indicate to the traffic at the end of the queue to stop. At night time only one roving flagman equipped with a "Stromberg Lightman" xenon strobe, or similar approved, and a torch is required at each traffic control point as well as the traffic light operator. No flagman shall be on duty for a period of more than 10 hours per day.

Flagmen shall have in their possession, at all times, certification that they have attended and passed an accredited course in flagging techniques before being allowed onto the construction site.

Flags shall be made from bright red material and shall be square with a minimum side length of 600 mm. The flag shall be attached to a staff at least 1,0 m in length.

In terms of lateral clearance and safety, flagmen shall stand on the shoulder of the lane of traffic that is being controlled and under no circumstances shall flagmen be permitted to stand within the traffic lane. In order to obtain maximum visual impact for the travelling public, flagmen shall stand alone."

i) Temporary rumble strips

Where ordered by the Engineer, the Contractor shall install temporary rumble strips. The distances between units will be as directed by the Engineer."

(j) Traffic signals

A traffic signal control system shall consist of four traffic signals, each with three aspects, and shall include the control devices, power supply and mountings.

Temporary traffic signals and control shall comply with the following requirements:

a) the signals and power supply shall be capable of operating under all weather conditions for uninterrupted periods of at least 24 hours
b) standard signal faces with 210mm diameter red, amber and green aspects shall be provided by the Contractor
c) traffic signal lights shall comply with SABS 1450-1988. Aspects shall be fitted with 50W tungsten halogen lamps
d) two standard signal faces, erected on opposite sides of the road, shall be provided to control each direction of traffic flow
e) two 1000W floodlights, mounted on 3,5m timber posts shall be provided at the start and end of each section where traffic is controlled by means of traffic signals
f) in the event of failure of the traffic signals an immediate system of STOP and GO control, with operators equipped with two-way radios, shall be available.

Sufficient personnel, equipped with two-way radios in good order and additional batteries, shall be provided to operate the traffic signal control system in shifts not exceeding 8 hours. The same personnel shall not be on duty throughout an entire night.

All traffic signals shall be under constant supervision of at least two operators to ensure that there is no interruption of the service, that any malfunction of the traffic signal equipment is immediately detected and the safety of road users ensured by implementing manual traffic control operations.

No separate payment shall be made for operators controlling the traffic signals. The tendered rate for item B15.11 shall include full compensation for such operators. No separate payment shall be made for relocating the signals."

BA 1.5.7.6 MAINTENANCE OF EXISTING ROADS USED AS DETOURS

Add the following:

"The Contractor shall indemnify the Employer against all proceedings, claims, actions, damages and costs which may arise from or be related to damage to vehicles or property or injury to persons as a result of loose stones or aggregates on the road surface or as a result of bituminous applications during the construction of the works.

The Contractor shall arrange his activities so that construction traffic and equipment do not unnecessarily obstruct public traffic or force it to a complete standstill. The flow of public traffic shall always take precedence and the Contractor shall not stop or delay public traffic to make way for construction traffic.

CHARPTER 2: SERVICES

Please Add: All services will be conducted according to COTO Standard Specification, where multiple specifications or guide are given, approval form the Project Engineer should be granted prior implementation.

CHARPTER 3: DRAINAGES

Please Add: All services will be conducted according to COTO Standard Specification, where multiple specifications or guide are given, approval form the Project Engineer should be granted prior implementation.

CHARPTER 4: EARTHWORKS AND PAVEMENT LAYERS: MATERIALS

SECTIONS 4.1: BORROW MATERIALS

BA 4.1.3.1 Employer identified borrow pits and quarries

Remove paragraphs one and two and replace with the following:

"a list of proposed borrow pits will be provided to the contract at site hand over stage, the contractor will then be required to arrange with an approved geotechnical laboratory to facilitated testing and profiling of those proposed borrow pits. Payment shall be made in item C4.1.2.

The engineer or employer will after receiving geotechnical investigations of the borrow pits them provide the contractor with the approved list of borrow pits to be used.

The contractor will be responsible in obtaining all necessary approvals and correspondence on behalf of the employer from respective land lords." Where borrowpits are not applicable, the contractor will use the commercial source material and inform the employer prior implementation.

BA 4.1.7.2 Borrow pit and quarry operations

a) General control at the borrow pits and quarries

add the following:

"The Contractor has to adhere to the EIA and the Department of Minerals and Energy prescriptions according to the approved mining permit or plan. Minimum requirements are that the area be fenced off, an access control gate and hut be set up and the sign proclaiming the site as an official borrow area of the Free State Provincial Government be erected. Access control to borrow pits needs to be performed by a dedicated person"

PAYMENT ITEMS

Item	**Description**	**Unit**
C4.1.1	**Compiling and implementing M&U plans**	**Number**

Amend as follows:

All tendered rates shall include activities required for compiling and implementing M&U plans, thus no additional payment will be made for this activity. Item C4.1.1 will not apply to this contract.

Item	**Description**	**Unit**
C4.1.15	**Shaping and Finishing the borrow pit and guarry areas and the stockpile**	

Amend as follows:

"for both sub-items items (c) will not be applicable as stockpile site/yards will remain the contractors responsibility and the employer will be exonerated from any liability thereof."

CHARPTER 5: EARTHWORK & PAVEMENT LAYERS CONSTRUCTIONS

SECTIONS 5.3: ROAD PAVEMENT LAYERS

BA5.3.3.1 SOURCE OF MATERIAL

Add the following:

*"*The existing road surfaced materials will be used as a subbase layer after being modified with the recommended stabilizing agent to achieve the C3 design structure. The commercial G5A material should be sourced out and spread on the existing road at a depth of 150mm and recycle to 200mm with a stabilizing agent to achieve a C3 design with a 100% MDD, the total new subbase will be 200mm deep. The commercial G1 material will be utilized to build the 150mm base structure to achieve 88%

AD. The *v*isual assessments for existing road conditions have been done of the sealed roads, it is envisaged that ground conditions are favourable. However additional testing of suspect ground conditions will be conducted in certain areas and roadbed treatment adjusted accordingly."

BA 5.3.3.2 USE OF MATERIAL

Add the following after the first paragraph:

The material classification for pavement layers under this contract shall be as follows:

- Subbase layer consist of C3: USC (1,5 Mpa Min Mpa) ITS 250Mpa min compacted to 100% MDD, comprising of at least G5A material or higher.
- G1 base layer compacted to 88% AD

BA 5.4.5.3 Cementitious Stabilising Agents

Remove the last sentence and replace with the following:

"Samples of all materials to be stabilised will be provided to the Engineer's laboratory for testing and compilation of stabilisation mix design, prior to commencement of any trial sections."

Add the following:

"Where reference is made in this Specification or the Standard Specifications to the cement specifications, e.g. SABS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification:

SABS ENV 197-1 "Cement compositions, specifications and conformity criteria, Part 1: Common cements.

On this Contract CEM II 32.5 AL or available approved alternative shall be used for stabilisation purposes"

BA 5.4.5.5 Water for Stabilisation

Add the following:

"Provision of construction water is the responsibility of the contractor and thus all tests and quality assurance procedures are to be done by him/her. No additional cost will be made in leu of testing possible water sources."

BA 5.4.7.3 Chemical Pre-treatment and Stabilisation

Amend as follows:

*"*Apply of cementitious agent by mechanical means will not apply on this contract unless prior approval is granted by the project manager, in leu of time constraints on the contract. All stabilisation and/or modifying agents are to be applied by hand (labour intensive) to enhance job creation."

BA 5.4.7.7 Protection and curing of chemically stabilised layers

Amend as follows:

"items b,c,d will not apply unless prior approval has been granted by the project manager on a case by case basis."

BSM SPECIFICATIONS

SECTION A 5.3: PAVEMENT LAYERS

BA5.3.5.1 MATERIALS INFORMATION

(a) General

ADD THE FOLLOWING TO THE SECOND PARAGRAPH:

"Natural gravel shoulder material shall comply with the requirements of a Type 1 material according to Table 3402/4."

ADD THE FOLLOWING AFTER THE SECOND PARAGRAPH:

"Distinction shall be made between crushed and natural G4, G5 and G6 materials. Where the crushing and/or screening of these materials has been specified, the combined grading shall conform to the grading limits specified for G4 class material in Table B3402/1.

The same shall apply for all materials obtained from commercial sources."

REPLACE THE GRADING SECTION IN TABLE 3402/1 WITH:
"TABLE B3402/1: REQUIREMENTS FOR TYPES OF G4 TO G6 MATERIALS

GRADING	Nominal aperture size of sieve (mm)	Percentage passing through sieve by mass			The percentage by mass passing the 2,00 mm sieve shall not be less than 20% nor more than 70%
		Crushed material Nominal maximum size		Uncrushed material (mm)	
		37,5 mm	28 mm		
	53			100	
	50			95 – 100	

	37,5	100		85 – 100	
	28	86 – 95			
	20	73 – 86	87 – 96	61 – 91	
	14	61 – 76	73 – 86		
	5	37 – 54	43 – 61	31 – 66	
	2	23 – 40	27 – 45	20 – 50	
	0,425	11 – 24	13 – 27	10 – 30	
	0,075	4 – 12	5 – 12	5 – 15	

Note:

Refer to standard COTO table for grading if required."

(b) Compaction requirements

AMEND THE COMPACTION REQUIREMENTS AS FOLLOWS:

"Lower selected layer	:	Shall be compacted to minimum 93% of modified AASHTO density.
Upper selected layer	:	Shall be compacted to minimum 93% of modified AASHTO density.
Subbase	:	Shall be compacted to minimum 95% of modified AASHTO density.
Emulsion treated base	:	Shall be compacted to 100% of modified AASHTO density.
Shoulder and wearing course	:	Shall be compacted to minimum 93% of modified AASHTO density."

ADD THE FOLLOWING SUBCLAUSE:

"(d) Material requirements

(a) General

Add the following at the end of the second paragraph:

" For chemically stabilised layers the material shall conform to the requirements in table B3402/5. For a BSM2 the materials and requirements of the stabilised layer shall comply with TG2*"

(*Technical Guidelines: Bitumen Stabilised Materials, Third Edition, August 2020).

Replace Table 3402/5 with:

"Table B3402/5

Requirements for Chemically Stabilised Layers

Classification	**C1**	**C2**	**C3**	**C4**
Material before treatment	At least G2 quality	At least G4 quality	At least G5 quality	At least G6 quality
PI after treatment	Non-plastic	Non-plastic	6 max. *(1)	6 max. *(1)
UCS (MPa) *(2)	6 min.	4 min.	1,5 min	0,75 min.
ITS (kPa) *(3)	-	-	250 min.	200 min.
WDD (% loss)	5 max.	10 max.	20 max.	30 max.

Note * (1) For materials derived from the basic crystalline rock group, the Plasticity Index after stabilisation shall be non-plastic.

* (2) Unconfined Compressive Strength @ 100% Mod. AASHTO density

* (3) Indirect tensile Strength @ 100% Mod. AASHTO density

* (4) Wet/Dry Durability according to Method B 8110"

ADD TABLE B3402/6 AFTER TABLE 3402/5:

"TABLE B3402/6: REQUIREMENTS FOR EMULSION TREATED MATERIALS

Criteria	**BSM1**	**BSM2**
Material before treatment	**G1 to G4**	**G5 to G6**
After treatment: - Minimum CBR @ 95% modified AASTHO density - ITS_{dry} tested in accordance with TG2 Third Edition, 2020 - ITS_{wet} tested in accordance with TG2 Third Edition, 2020	 80% >225 kPa >125 kPa	 30% >175 kPa >100 kPa

(b) Compaction requirements

Add the following to this sub-clause:

The compaction requirements for the layers to be constructed under this contract are:

Upper 150mm of recycled layer	100% of mod AASHTO Density
Lower 150mm of recycled layer	97% of mod AASHTO Density
Gravel Shoulder	93% of mod AASHTO density

Add the following sub-clause:

"(d) Excavations

Excavations in the pavement shall be kept dry. In the event of water penetrating the underlying layers, construction of the consecutive layers shall be postponed until the underlying layers are dry enough to accommodate the construction plant without any deformation or distress."

BA5.3.7.3 CONSTRUCTION OF PAVEMENT LAYERS

(a) Requirements applying prior to the construction of the layer

"Add the following"

Pre-milling (pulverizing) of the pavement materials to a depth of 50mm less than the intended recycling depth shall be carried out. The intention is to identify any material in the existing pavement that is unsuitable for recycling. Unsuitable material shall be removed from the pre-milled material and spoiled. Payment for removal and spoil of the material shall be made under pay item 34/33.07. Suitable material shall be imported prior to the recycling process and shall be paid under item B34.06.

Where make-up material is required to construct the road to the correct lines and levels the additional material shall be spread, shaped and lightly compacted before the recycling operation commences. Payment for the addition of material shall be made under pay item B34.06. Additional imported material shall comply with the requirements for base material.

Additional imported material from a commercial source, shall comply with the requirements for base material.

(b) Placing and compacting

Add the following:

(i) In situ reworking of pavement structure

"The existing pavement structure shall be reworked to a depth of 200mm by means of the cold in situ recycling process. The material shall for tender purposes be stabilized with 1,0% Cem II:32,5N and bitumen emulsion, 3% bitumen emulsion and compacted to provide a base layer complying to BSM2 specifications as per Table B3402/6 or TG2-2020. The maximum dry density of the material to be stabilized shall be assumed to be 2200 kg/m^3 for tender purpose. The actual density shall be determined on site.

It is intended that the in-situ treated layers of 200mm thick, be compacted as one layer in order to minimize time loss and assist in traffic accommodation. Pre-milling (pulverizing) to 100mm depth must be included in the tender rate for item B34.04.

Construction of bitumen stabilized materials (BSM2):

When the 200mm thick base layer is tested with a nuclear density meter the upper 200mm layer $D_{(0 - 150)}$ shall have a density of not less than 98% of modified AASHTO density while the lower layer between 150mm and 200mm $D_{(150 - 200)}$ shall have a density of not less than 97% of modified AASHTO density when calculated as follows:

$D_{(150 - 200)} = 2 \times D_{(0 - 200)} - D_{(0-150)}$

Where D_{0-150} = Density as measured for 0 to 150mm layers

D_{0-200} = Density as measured for 0 to 200mm layer

$D_{150-200}$ = Density as measured for 150 to 200mm layer

The recycled pavement structure shall be restored as closely as possible to the required level. The tolerances applied to the final reworked layer shall be as specified in clause 3405 of the standard specifications.

Where an in situ recycler is used as the method of construction of the following minimum requirements shall apply to the plant used to in situ recycle and construct bitumen stabilized materials:

Bitumen application system:

- The recycler shall be fitted with at least two fully operational spray bars.

- The recycler shall have sufficient horsepower to cut/mill into the pavement to the required depth and simultaneously push the recycling "train".

- The milling chamber shall have sufficient volume to accommodate and mix the material generated by the milling or pulverizing to the required depth.

- The recycler shall have two independent micro-processor controlled application systems with separate spray bars; one of the bitumen and the other for applying water to increase the moisture of the recycled material. The micro-processor controlled pumping system mounted on the recycler must be designated to monitor and adjust the application of the bitumen in accordance with the volume of material being recovered as the recycler advances.

- The pump incorporated into the bitumen emulsion system on the recycler, together with injection nozzles fitted on the spray bar shall not promote premature breaking of the emulsion.

- The recycler shall have a positive system for maintaining the set-up of the recycler which includes the depth of cut and the relative inclination.

Other:

- All tankers shall be inspected for leaks prior to coupling into the recycling “train” and shall be free of any leaks

- The internal diameter of the feed pipe between the bitumen tanker and the recycler shall not be smaller than 100mm.

- All feed pipes shall be capable of withstanding negative pressure and shall not be the “lay-flat” type of those.

- Close-off valves shall be fitted at both ends of the water pipe feed.

- All feed pipes shall be free of leaks.

Furthermore, the contractor shall carefully monitor and report to the employer’s agent the consumption of bitumen emulsion during the execution of the work”.

BA5.3.7.14 CONSTRUCTION TOLERANCES

(e) Construction tolerances

The layer of in-situ recycled material shall be classified as a base layer regarding compliance with the construction tolerances.”

BA5.3.7.15 CONSTRUCTION

ADD THE FOLLOWING SUBCLAUSE:

"(f) Temporary stockpiling of material

The Contractor shall plan his activities so that materials excavated from borrow areas and cuttings or imported from commercial sources can be directly transported to and placed at the designated points.

The temporary stockpiling of material will not be paid for separately unless instructed by the Engineer, and full compensation will be deemed to have been included in the rates tendered for the various payment items for work for which the material is to be used."

BA5.3.7.16 QUALITY OF MATERIALS AND WORKMANSHIP

REPLACE THE SECOND PARAGRAPH WITH THE FOLLOWING:

"Test results and measurements will be assessed in accordance with the provisions of Section 8200."

BA5.3.7.17 MEASUREMENT AND PAYMENT

DELETE THE FIRST PARAGRAPH AND REPLACE IT WITH THE FOLLOWING:

"No additional or extra over payment will be made for work in restricted or confined areas."

BA5.3.7.18 In-situ reworking of existing pavement layers by pre-milling to a depth of:

(i) 150 mm cubic meter (m^3)

The unit of measurement shall be the cubic metre of compacted pavement layer, and the quantity shall be calculated from the authorized dimensions of the completed layer.

The tendered rates shall include full compensation for setting out the works, and pre-milling as specified. The removal of unsuitable material shall be paid for under item 34/33.07.

When the values listed in Table 3402/5 cannot be attained with the type and quantity of stabilizing agent specified in Section 3500 in the Project Specifications, the Engineer will authorise the Contractor to vary and/or amend the quantity and possibly the type of stabilizing agent as well in order to obtain the required values."

B19 A5.4 STABILIZATION

BA5.4.5.4 MATERIALS

(c) Material for bituminous stabilization

(i) Bituminous stabilizing agents

ADD THE FOLLOWING:

The bituminous stabilizing agent shall be a 60% anionic stable-grade bitumen emulsion. The nominal rate of application for tender purposes shall be 3% nett bitumen of compacted material. The contractor will be paid for the actual emulsion used as per the final mix design.

The Engineer may instruct the Contractor to amend the rate of application after tests on site during construction."

(ii) Fillers

ADD THE FOLLOWING:

"The filler to be used shall be CEM II B – l 32.5 N cement or road lime as directed by the Engineer. The nominal rate of application for tender purposes shall be 1,5% of compacted material.

The Engineer may instruct the Contractor to amend the rate of application and type of filler after tests on the Site during construction."

BA5.4.5.9 TOLERANCES

(b) Uniformity of mix (chemical stabilization)

ADD THE FOLLOWING:

"The coefficient of variation shall not exceed 0,3 (30%) for mixing in place and 0,2 (20%) for plant-mixed material, calculated as follows:

$$\frac{S_n}{X_n} \times 100$$

where:

X_n is the average, and

S_n is the standard deviation of stabilizer."

BA5.4.5.10 CONSTRUCTION OF TRIAL SECTION

ADD THE FOLLOWING TO THE LAST PARAGRAPH:

"The fact that the Engineer has approved the mixing process shall not relieve the Contractor of his obligations in respect of the mixing specified elsewhere in the Specifications. It will serve only as a guideline to ensure that the specified mixing requirements can actually be met."

BA5.4.5.10 QUALITY OF MATERIALS AND WORKMANSHIP

REPLACE THE SECOND PARAGRAPH WITH THE FOLLOWING:

"Test results and measurements will be assessed in accordance with the provisions of Section 8200."

ADD THE FOLLOWING TO THE FOURTH PARAGRAPH:

"The stabilized material sampled from the layer for the compaction of modified AASHTO briquettes, shall be prepared according to SANS 3001-GR54 (Replacing TMH1 Method A16T); i.e. discard material coarser than a 37,5 mm test sieve, and compacted according to SANS 3001-GR31 (Replacing TMH1 Method A7)."

ADD THE FOLLOWING PARAGRAPHS:

"The Engineer shall be notified at least 48 hours in advance of any planned stabilization to enable him to conduct tests himself.

Stabilization strength shall be determined by incorporating the Rapid Cure Method as described in SANS 3001-GR53 (Replacing TMH1 Method A13T).

Where the stabilizing agent is to be spread by hand, pockets of the stabilizing agent shall be placed on the layer at regular intervals. However, spreading shall only commence when the Engineer is satisfied that the correct quantity of stabilizing agent has been placed on the layer and has given permission that the stabilizing agent may be spread."

B5.4.5.11 MEASUREMENT AND PAYMENT

REPLACE THE FIRST PARAGRAPH WITH THE FOLLOWING:

"No additional or extra over payment shall be made for stabilization work in restricted or confined areas."

Item

B35.01 Chemical stabilization extra over unstabilized compacted layers

REPLACE THE FIRST PARAGRAPH WITH THE FOLLOWING:

"The unit of measurement shall be the cubic metre of stabilized material, the quantity of which shall be determined in accordance with the final in-situ authorised dimensions of the layers treated as instructed by the Engineer. Additional material preshaped to allow for finishing by cutting only will not be included in the measurement."

ADD THE FOLLOWING TO THE PAYMENT PARAGRAPH:

"The tendered rate shall also include full compensation for working in restricted areas on top of and alongside culverts where necessary."

Item

BA35.02 Chemical stabilizing agent

REPLACE THE THIRD PARAGRAPH WITH THE FOLLOWING:

"Subject to the provisions of clause 1220, the quantity of stabilizer will be determined in accordance with the authorised rate of application and layer dimensions. Extra stabilizer added for wastage and higher pre-shaping levels will not be included in the quantity."

CHARPTER 8: PRETREATMENT AND REPAIR OF EXISTING LAYERS

Please Add: All services will be conducted according to COTO Standard Specification, where multiple specifications or guide are given, approval form the Project Engineer should be granted prior implementation.

CHARPTER 9: ASPHALT LAYERS

SECTION 9.1: ASPHALT LAYERS

BA 9.1.5 MATERIALS

A9.1.5.2 Bituminous binders for asphalt mixes

Add the following

“The binders to be used shall be as follows:

a) Continuously graded surfacing course: 60/70-penetration grade bitumen.

b) Continuously graded base: 40/50-penetration grade bitumen."

BA 9.1.7.4 TRANSPORTING OF ASPHALT

Add the following paragraph:

"Special precautions shall be taken by the contractor to ensure that the temperature of the total mass of asphalt does not decrease by more than 10^{o}C from point of dispatch to the point where it is to be paved. The use of thermal blankets is obligatory."

The Contractor shall ensure that trucks used to haul asphalt are not overloaded and the legal axle loads are not exceeded. Before any asphalt can be transported, the Contractor must provide the Engineer with the certified carrying capacity of each truck intended for the purpose of transporting the mix. The Contractor shall provide the Engineer with a weighbridge ticket before discharging into the paver hopper. Any truck that is overloaded shall be penalised as set out below:
A penalty shall be applied at a rate twice the Contractor's tendered rate for placing the mix under items 42.01, 42.02, 42.10 and/or 42.11. For the purposes of the calculation, the so called 5% grace shall not be used. The penalty shall be R5000/t or *pro rata*/part-ton of overloaded product as calculated as per the following example:
Tare weight of vehicle certified by official traffic department weighbridge = 6t
Maximum carrying capacity certified by official traffic department weighbridge = 8t

Gross vehicle mass	= 14t
Actual load (weighbridge ticket)	= 14,6t
Overload	= 0,6t
Flat rate	= R5000/t

Penalty = 5000/t x 0,6 tons
= R 3000"

BA 9.1.7.9 JOINTS

Add the following to this clause:

"Where the difference in level between the new work and the existing road surface exceeds 25mm, joints shall be treated as follows:

Transverse steps at the end of a day's work shall be tapered off at a slope of 1 vertical to 20 horizontal (1:20) to tie in with the existing surface. The tapered section shall be removed before surfacing is recommenced and a joint formed in accordance with clause 4208 of the specification.

Longitudinal joints exposed to traffic shall be provided with a taper of compacted asphalt material over the full length of the exposed joint. The width of the taper shall be at least 5 times the difference in level between the old and new work.

All costs involved in the provision and removal of these temporary ramps shall be deemed to have been included in the rates tendered for the relevant asphalt pay item."

BA 9.1.8.8 SAMPLING

Add the following subclause:

"(a) Special tests

n-Heptance-Xylene Equivalent (Spot test) (AASHTO-T102)

If the engineer suspects that bitumen or asphalt has been overheated, he may order that the bitumen, or the bitumen recovered from the asphalt, be subjected to the Spot Test. Recovery of binder for use in the Spot Test shall be carried out according to an approved method.

Any bitumen having an n-Heptance-Xylene equivalent in excess of 36, or in excess of the manufacturers test result on the dispatched stock, shall be considered to have been overheated and shall be deemed to be rejected unless proven otherwise."

C9.1 ASPHALT LAYERS

PART C: MEASUREMENT AND PAYMENT

Amend the following payment items:

"ITEM
UNIT

BA 9.1.5.1 Asphalt Surfacing: Rehabilitation ton

(a) Stone Skeletal mix – Continuously graded 30mm thick, 60/70 penetration grade bitumen and aggregate of 4,75 (maximum size) ……(ton)

Replace first paragraph with the following:

The unit of measure for sub-item (a) shall be the ton of asphalt overlay placed to the nominal thickness specified and measured according to certified weighbridge tickets issued in respect of the mixture used.

Construction method shall be by means of mechanical propelled asphalt paver meeting all specifications and inspections by the engineer.

No payment shall be made for excess width and wastage of asphalt, and the mass of such excess or wasted material shall be deducted from the recorded delivery for payment purposes.

No payment shall be made for asphalt in excess of the mean spread rate(s), which shall be determined as follows on the following page:

$$S = \frac{1000}{A \times B} \quad m^2/t$$

where:

S = Mean spread rate in m^2/t
A = Average bulk relative density achieved on the road in t/m^3
B = (specified asphalt thickness in mm) + 5mm".

"The tendered rate shall also include full compensation for joint forming, temporary ramping of construction joints between paving operations when new work is opened to traffic (including ramping material), breaking up and disposal of temporary ramps and waste material, weighing the material on the specified weighbridge and cleaning the surface."

Add the following new payment items:

ITEM	DESCRIPTION	UNIT
BA 9.1.17	**Penalty for overloading**	**ton (t)**

CHARPTER 10: SURFACE TREATMENTS

SECTION 10.1: GENERAL REQUIREMENTS FOR SURFACE TREATMENTS

BA10.1.1 SCOPE

Add the following:

"On this project the double seal shall consist of a pre-coated 20,0 mm aggregate (ALD > 12,0 mm) with tack coats of Class S-E1 modified binder, followed by a pre-coated 10 mm aggregate with penetration layers of Class SE-1 modified binder. The final fog spray shall be a 30% spray-grade anionic emulsion."

BA10.1.3.1 REQUIREMENTS PERTAINING TO ALL SURFACE TREATMENTS

Add the following:

"All plant and equipment to be utilised for sealing operations are to be thoroughly inspected for any diesel and oil leaks by the engineer prior to sealing operations. The contractor is to submit with his method statement a list of back-up plant for any plant and equipment utilised on sealing operations."

BA 10.1.3.2 Weather Limitations

Add the following limitations:

"Seal work using bitumen rubber or polymer modified binder shall not be permitted during the months of May, June, July and August.

Winter grade binders shall not be used in any seal work and the Contractor's programme shall reflect this limitation.

Extra care shall however be necessary during the winter period (April to September) to ensure the success of the temporary seal and surfacing on the milling sections and the minimum measures that the Contractor shall adhere to includes the following:

- Sealing during daytime (spray application): 10 ^{o}C rising surface temperature.
- Do not seal during windy conditions and/or eminent raining conditions
- Ensuring that the chip spreader is right behind the sprayer. If not, the operation shall immediately be halted by the Engineer
- The backfilling / back chipping teams shall complete a section prior to commencement of spraying the following section
- Maximum length to be sprayed will be restricted to 500m

Recommended rolling methods:

- Firstly : Steel wheel rollers until stones are well set
- Secondly : Drag broom
- Thirdly : Pneumatic rollers
- Fourthly : Normal mechanical broom
- Fifthly : 2nd rolling by steel rollers, before application of fog spray.

- Trucks shall not interfere / obstruct any rollers on the sprayed sections. Rollers must be able to cover the full extent of the sprayed section
- All excess stone must be swept off the road between 18 and 24 hours after construction of the seal

These precautions are necessary to ensure proper adhesion before the binder becomes too cold to be receptive to the stone and to minimize the risk of trapping water under the strain-alleviating membrane interlayer (SAMI). In terms of the temperatures, the day and overnight temperatures will be dictating whether such construction is at all possible or not.

The Contractor is advised that weather information from the closest weather station should be gathered and the typical average, maximum and minimum on a month-to-month basis be evaluated to predict what can typically be expected. The day – night sinusoidal temperature curves will give the Contractor an indication when work typically can commence and should be stopped. This information shall be required to accompany the weekly programme of the SAMI work.

Whilst the above measures are mainly aimed at the winter period (April to September), they shall also apply to the summer period, with the exception of the sprayer pull restriction of 200m."

BA 10.1.3.7 Decatron of working area

Remove second paragraph and replace with the following:

" Before the tack coat and first application of aggregate may be applied, the centreline of the road shall be demarcated by means of a clearly visible weatherable fibre rope, pegged down with nails driven into the existing surface at intervals of 15 m on straight sections and 3 m apart on curves.

The demarcating rope shall be removed prior to the application of the tack coat and aggregate on the adjacent lane. Payment for the demarcation shall be deemed to be included in the rates."

BA 10.1.3.11 Opening to Traffic

"add the following paragraphs:

Recommended opening of road to traffic:

- Seal to be exposed gradually (in stages) to traffic
- On first night after completion of seal, low traffic on the seal
- On the following two days during day time, only open to traffic when road temperatures exceed 10^{o}C. Close section during night
- On third day following completion of seal, open road again in the morning. Depending on temperature of the seal, road can remain open onwards from this night.

BA 10.1.5.14 Pre-coating of hydrophilic aggregates

(c) Pre-coating of aggregate stockpiles

Add the following:

Pre-coating of aggregate shall be undertaken a minimum of 4 days ahead of sealing operations to allow the aggregates to dry out properly before application. No free pre-coating fluid shall be observed when the aggregate is inspected by hand.

CHARPTER 11: AUXILLIARY ROAD WORKS

Please Add: All services will be conducted according to COTO Standard Specification, where multiple specifications or guide are given, approval form the Project Engineer should be granted prior implementation.

CHARPTER 11.6: ROAD SIGNS

SECTION 11.6.5.1: General material specifications

BA11.6.1 SCOPE

Add the following:

"Design Specification strictly according to detailed drawings: Horizontal- and vertical placement according to SARTSM / FRG installation specification. Lateral placement and sight distance according to Table 3.1 SARTSM Material: • Metal: Chromadek Flat Signs (Warning, Regulatory, etc.) = 1.4mm thickness; Panel Construction (GD, Tourism, Local Destination) = 1mm thickness. • Vinyl: retro-reflective 3M material with a seven year's lifespan, see SANS 1519, road sign manufacturer preferably

SARTSMA accredited. Posts: • ''Tanalite'' treated wooden posts; • Size and dimensions according to SARTSM; • Post length calculated as follows: 600mm depth + difference between shoulder breaking point and bottom of drainage + 2000mm clearance + sign height = post length; • Excavation: 400x400x600mm posts secured with soil-crete (1 part cement x 12 parts gravel) compacted covered with Ø300mm cap (1 part cement x 6 parts sand) to avoid water ponding at posts. Clamps: • Clamps must fit post; • Hammer a nail underneath each clamp to avoid clamp sliding down. Says: • According to SARTSM specification".

"Vinyl: retro-reflective material with a seven year's lifespan, see SANS 1519 or equivalent, All permanent and temporary signs shall have a fully retro-reflective background. In addition, the symbol and border on permanent command, reservation and comprehensive signs, and the border on all permanent and temporary signs shall be fully retro-reflective (excluding signs with a black border); The symbol on permanent and temporary prohibition signs and the symbol and border on temporary command, reservation and comprehensive signs shall be provided in a durable semi-matt material or finish; Road signs manufactured using any form of silk-screening process shall not be used; The backside color of any road sign that will be used as a movable sign will be ordered with semi-matt black and class I yellow stripes as per SARTSM specification".

"Road Sign manufacturers shall provide written guarantees of road sign materials used; These guarantees will be placed on contract file for future follow-up should material fail in any way for the lifespan guaranteed; Any retro-reflective material used to manufacture road signs shall be of a 7-year warranty Semi Matt, Class I and or Class III material".

11.1 ROAD MARKINGS AND ROAD STUDS

A11.7 ROAD MARKINGS AND ROAD STUDS

A11.7.1 SCOPE

Add the following:

"BA11.7.7.11".

This Section covers the temporary and final marking of the road surface with lines and symbols and the supply and fixing of retro-reflective or solar powered road studs as indicated on the drawings or specified by the Engineer. This Section also covers the removal of existing road studs and repair of the road surface, as well as the supply and fixing of temporary road studs as specified by the Engineer, and the removal of existing road markings. Temporary road marking shall be retro-reflective and serve the purpose of guiding and warning road users during construction processes and under reduced speed restrictions.

All road markings shall be of the standard regulatory, warning and guidance markings as detailed on the drawings and in accordance with the SADC and South African Road Traffic Signs Manuals.

Road marking application shall be based on materials conforming to various SANS requirements and

divided either on method and type of material application specification; or alternatively based on performance based application, where the road marking performance shall be monitored and measured, and payment based on such measured performance over time. Performance based criteria shall be specified in the specifications and measurement and payment section. Selection of either the method and type of material application specification; or performance based application shall be as specified by the Engineer but shall be instructed prior to the application of the road marking, and additionally performance based application shall not be applicable to first road marking application applied after road surfacing, resurfacing or bitumen rejuvenation.

The Contractor shall provide temporary traffic control facilities in accordance with the specifications given in Section A1.5 of Chapter 1 to ensure traffic safety where work is being executed.

CHARPTER 20: QUALITY ASSURANCE

Please Add: All services will be conducted according to COTO Standard Specification, where multiple specifications or guide are given, approval form the Project Engineer should be granted prior implementation.

C3.3 PARTICULAR SPECIFICATIONS (ENVIRONMENTAL & OCCUPATIONAL HEALTH AND SAFETY)

PART E: OHSA 1993 HEALTH AND SAFETY SPECIFICATION

SECTION C: ENVIRONMENTAL MANAGEMENT PLAN

TABLE OF CONTENTS **PAGE**

C1001 SCOPE.....C3.**Error! Bookmark not defined.**

C1002 DEFINITIONS .....C3.**Error! Bookmark not defined.**

C1003 LEGAL REQUIREMENTS .....C3.**Error! Bookmark not defined.**

C1004 ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONSC3.**Error! Bookmark not defined.**

C1005 TRAINING.....C3.**Error! Bookmark not defined.**

C1006 ACTIVITIES/ASPECTS CAUSING IMPACTS .....C3.**Error! Bookmark not defined.**

C1007 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIESC3.**Error! Bookmark not defined.**

C1008 AREAS OF SPECIFIC IMPORTANCE .....C3.**Error! Bookmark not defined.**

C1009 REHABILITATION.....C3.**Error! Bookmark not defined.**

C1010 RECORD KEEPING.....C3.**Error! Bookmark not defined.**

C1011 COMPLIANCE AND PENALTIES.....C3.**Error! Bookmark not defined.**

ENVIRONMENTAL MANAGEMENT

C 1001 SCOPE

The Employer recognises environmental management as a key component of road infrastructure development and as part of its environmental policy has developed this Environmental Management Plan (EMPI) as a tool for continual improvement in environmental performance.

This EMPI prescribes the methods by which proper environmental controls are to be implemented by the contractor. The duration over which the contractor's controls shall be in place cover the construction period of the project as well as the limited time after contract completion defined by the General Conditions of Contract, 2015 as the Defects Notification Period (maintenance period).

The provisions of this EMPl are binding on the contractor during the life of the contract. They are to be read in conjunction with all the documents that comprise the suite of documents for this contract, particularly the conditions of any environmental authorisation and associated Environmental Management Programme (EMPr). In the event that any conflict occurs between the terms of the EMPl and the rest of the project specifications or environmental authorisation, the terms herein shall be subordinate.

The EMPl is a dynamic document subject to similar influences and changes as are brought by variations to the provisions of the project specification. Any changes to the EMPl and/or environmental authorisation cannot occur without being submitted to the Employer who will manage the process of seeking approval of the change from the relevant authority.

The EMPl identifies the following:

- Relevant parties and their responsibilities;
- Construction activities that will impact on the environment;
- Specifications with which the contractor shall comply in order to protect the environment from the identified impacts; and
- Actions that shall be taken in the event of non-compliance.

C 1002 DEFINITIONS

Alien Vegetation: undesirable plant growth which includes, but is not limited to all declared category 1 and 2 listed invader species as set out in the Conservation of Agricultural Resources Act (CARA), 1983 regulations. Other vegetation deemed to be alien are those plant species that show the potential to occupy in number, any area within the defined construction area and which are declared to be undesirable.

Construction Activity: any action taken by the contractor, his sub-contractors, suppliers or personnel during the construction process as defined in the contract documents.

Environment: the surroundings within which the contract exists and comprises land, water, atmosphere, micro-organisms, plant and animal life (including humans) in any part or combination thereof as well as any physical, chemical, aesthetic or cultural inter-relationship among and between them..

Environmental Aspect: any component of a contractor's construction activity that is likely to interact with the environment.

Environmental authorisation: a written statement from the National Department of Environmental Affairs, (DEA), with the general and specific conditions and the EMPr recording its approval of an application for a planned undertaking that triggers listed activities in the Environmental Impact Assessment (EIA) regulations of the National Environmental Management Act (NEMA).

Environmental Impact: any change to the environment, whether desirable or undesirable, that will result from the effect of a construction activity. An impact may be the direct or indirect consequence of a construction activity.

Environmental Impact Assessment (EIA): a systematic process of identifying, assessing and reporting environmental impacts associated with an activity and includes basic assessment and scoping and environmental impact reporting.

Environmental Management Programme (EMPr)*:* the embodiment of this EMPl to ensure that undue or reasonably avoidable adverse impacts of a development are prevented, and to ensure that positive impacts are enhanced. It thus addresses the how, when, who, where and what of integrating environmental mitigation and monitoring measures through identified projects.

Road Reserve: a corridor of land, defined by co-ordinates and/or proclamation, within which the road, including access intersections or interchanges, is situated. A road reserve may, or may not, be bounded by a fence.

Site; the site is defined in the General Conditions of Contract and in the scope of works. It is bound by the limits of construction as shown in the drawings or the title of the project and extends to also include the following:

- Areas outside the construction zones where accommodation of traffic is placed;
- All borrow pits defined in the applications approved by the relevant Department of Mineral Resources (DMR);
- All haul roads constructed by the contractor for purposes of access;
- Any non-adjacent sites specified in the contract documentation;
- The contractor's and his subcontractors' camp sites; and

for the purposes of this EMPl includes areas outside of, but adjacent to, the road reserve that may be affected by construction activities.

C 1003 LEGAL REQUIREMENTS

(a) General

Construction shall be according to the best industry practices, as identified in the project documents. This EMPl, which forms an integral part of the contract documents, informs the contractor as to his duties in the fulfilment of the project objectives, with particular reference to the prevention and mitigation of environmental impacts caused by construction activities associated with the project. The contractor should note that obligations imposed by the EMPl are legally binding in terms of this contract. In the event that any rights and obligations contained in this EMPl contradict those specified in the standard or project specifications then the latter shall prevail.

(b) Statutory and other applicable legislation

The contractor is deemed to have made himself conversant with all legislation pertaining to the environment, including provincial and local government ordinances, which may be applicable to the contract.

Major environmental legislation, as amended from time to time, includes but is not limited to the following:

(i) Conservation of Agricultural Resources Act (Act No. 43 of 1983)

This act provides for control over the utilisation of the natural agricultural resources of South Africa in order to promote the conservation of soil, water sources and vegetation, as well as combating weeds and invader plants.

(ii) The Constitution (Act 6 of 1996)

The Constitution states that everyone has the right to an environment that is not harmful to their health or well-being, and to have the environment protected through reasonable legislative and other measures to prevent pollution and ecological degradation; promote conservation and ensure ecologically sustainable development and use of natural resources.

(iii) Mineral and Petroleum Resources Development Act (Act No. 28 of 2002)

This act makes provision for equitable access to, and sustainable development of, minerals and petroleum resources.

(iv) National Environmental Management Act (NEMA), (Act No. 107 of 1998)

This act supports the Bill of Rights within the Constitution and highlights principles of sustainable development including preservation of ecosystems and biological diversity and avoidance, minimisation and remediation of pollution and environmental degradation. It also sets the stage for the EIA Regulations.

(v) National Environmental Management: Air Quality Act (Act No. 39 of 2004)

This act provides reasonable measures for the prevention of pollution and ecological degradation; and provides for specific air quality measures; for national norms and standards regulating air quality monitoring, management and control by all spheres of government.

(vi) National Environmental Management: Biodiversity Act (Act No. 10 of 2004)

This act makes provisions to accomplish the objectives of the United Nations' Convention on Biological Diversity. The Employer may be required to apply for permits to conduct certain listed activities which, together with the listed threatened or protected species, may be identified by the Minister.

Section 73 (3) of this act empowers a competent authority to direct a person to take steps to remedy any harm to biodiversity resulting from the actions of that person or as a result of occurrence of listed invasive species occurring on land on which that person is the owner. Thus the Employer may be directed to remedy harm caused by listed invasive species.

(vii) National Environmental Management: Protected Areas Act (Act No. 57 of 2003)

This act provides for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity, natural landscapes and seascapes.

(viii) National Environmental Management: Waste Act (Act No. 59 of 2008)

This act aims to regulate waste management practices through provision of national norms and standards, specific waste measures, licensing and control of waste activities, remediation of contaminated land as well as providing for compliance and law enforcement.

(ix) National Forests Act (Act No. 84 of 1998)

This act makes provision for promoting the sustainable management and development of forests, and for the protection of certain forests and trees for environmental, economic, educational, recreational, cultural, health and spiritual purposes.

(x) National Heritage Resources Act (Act No. 25 of 1999)

This act provides for an integrated and interactive system for identification, assessment and management of South Africa's heritage resources, and empowers civil society to nurture and conserve their heritage resources.

(xi) National Water Act (Act No. 36 of 1998)

This act makes provision for the protection of surface water and groundwater and their sustainable management for the prevention and remediation of the effects of pollution, as well as for the management of emergency situations.

C 1004 ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS

Copies of this EMPl shall be kept at the site office and must be distributed to all senior contract personnel who shall familiarise themselves with its contents.

Implementation of this EMPl requires the involvement of several stakeholders, each fulfilling a different but vital role as outlined herein, to ensure sound environmental management during the construction phase of a project.

(a) The Employer

The Employer is the holder of authorisations issued by the relevant environmental regulating authorities responsible for authorising and enforcing environmental compliance. The Employer and anyone acting on the Employer's behalf is accountable for the potential impacts of the activities that are undertaken and is responsible for managing these impacts.

(b) The Engineer

The engineer has been appointed by, and acts for, the Employer as its on-site implementing agent and carries the responsibility to ensure that the contractor undertakes its construction activities in such a way that the Employer's environmental responsibilities are not compromised.

The engineer will, within seven days of receiving a contractor's request for approval of a nominated Designated Environmental Officer (DEO), approve, reject or call for more information on the nomination. The engineer will be responsible for issuing instructions to the DEO where environmental considerations call for action to be taken.

If in the opinion of the engineer the DEO is not fulfilling his/her duties in terms of this EMPl, the engineer may, in writing and clearly setting out reasons, exercise his powers under GCC 2010 and instruct replacement of the DEO.

(c) The Contractor

The contractor is responsible for project delivery in accordance with the prescribed specifications, among which this EMPl shall be included.

The contractor shall receive and implement any instruction issued by the engineer relating to compliance with the EMPl including the removal of personnel or equipment.

Compliance with the provisions contained herein or any condition imposed by the environmental approvals shall become the responsibility of the contractor through an approved Designated Environmental Officer (DEO). The contractor shall nominate a person from among his site personnel to fulfil this function and submit to the engineer for his approval the *curriculum vitae* of the proposed DEO. This request for approval shall be given, in writing, at least fourteen days before the commencement of any construction activity clearly setting out reasons for the nomination, and with sufficient detail to enable the engineer to make a decision.

(d) The Designated/Dedicated Environmental Officer (DEO)

Once a nominated representative of the contractor has been approved he/she shall become the DEO and shall be the responsible person for ensuring that the provisions of this EMPl are complied with during the life of the contract. The DEO shall submit regular written reports to the engineer, but not less frequently than once a month.

The DEO may undertake other construction duties unless the Appendix to Tender prescribes this position as 'dedicated' as opposed to the standard position being 'designated'. However, the DEO's environmental duties shall hold primacy over other contractual duties and the engineer has the authority to instruct the contractor to reduce the DEO's other duties or to replace the DEO if, in the engineer's opinion, he/she is not fulfilling his/her duties in terms of the requirements of this EMPl. Such instruction will be in writing clearly setting out the reasons why a replacement is required.

As a minimum the DEO shall have an accredited diploma qualification in environmental or natural sciences or equivalent. Alternatively, the DEO shall have a minimum of 2 years' experience in a similar role in construction or other environmental regulatory field.

In addition to the compliance duties relating to EMPl the DEO shall also provide full cooperation whenever the contractor is subjected to regular environmental audits.

(e) Environmental Control Officer (ECO)

The Environmental Control Officer (ECO) is an independent environmental specialist appointed by the engineer to objectively and regularly monitor the contractor's implementation of this EMPl and the EMPr as may be

determined by the sensitivity of the project or by conditions of authorisations. These are 'internal' audits and the regularity determined by the environmental approvals, usually once a month. Other ad hoc or 'external' audits ordered by the Employer will be conducted by other environmental specialists.

C 1005 TRAINING

(a) Qualifications

The (DEO) shall have the minimum qualifications as prescribed above, and must be conversant with all legislation pertaining to the environment applicable to the contract. He/she must be appropriately trained in environmental management and possess the skills necessary to impart environmental management skills to all personnel involved in the contract.

The contractor shall ensure that adequate environmental training takes place. All employees shall have been given an induction presentation on environmental awareness. Where possible, the presentation needs to be conducted in the language of the employees.

(b) Content

Apart from induction environmental training should, as a minimum, include the course content below and no induction or course should be given until the engineer has been afforded the opportunity to appraise it and provide comment.

(i) The importance of conformance with all environmental policies and the consequences of departure from standard operating procedures;

(ii) Environmental impacts, actual or potential, caused by work activities, prevention measures to avoid them and mitigation measures when they occur;

(iii) Work force roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirement of the Employer's environmental management systems, including emergency preparedness and response requirements; and

(iv) The environmental benefits of improved personal performance.

(c) Induction

In the case of permanent staff the contractor shall provide evidence that such induction courses have been presented. In the case of new staff (including contract labour) the contractor shall inform the engineer when and how he intends concluding his environmental training obligations.

C 1006 ACTIVITIES/ASPECTS CAUSING IMPACTS

Typical environmental aspects and impacts associated with road construction are listed in Table 1: Aspects and Impacts Associated with Road Construction. Actual impacts will differ from project to project and, therefore, so may the mitigation measures employed. The commonest aspects and impacts are addressed separately and typical avoidance and/or mitigation measures described. The list and descriptions are not by any means exhaustive and they shall be used for guideline purposes only.

TABLE 1: ASPECTS AND IMPACTS ASSOCIATED WITH ROAD CONSTRUCTION

Aspect	**Impact**
Waste generation/storage	Water pollution; nuisance; visual impact
Water use and storm water discharge	Change in flow regime and/or reduction in downstream availability; soil erosion: water pollution
Vehicle use and maintenance	Air pollution; noise
Chemical/fuel storage	Water/air/soil pollution; health impacts; accidents e.g. slips, fire
Site clearing; earthworks; layer-works; seal works	Change in landform; impact on heritage resources; noise; soil erosion; air pollution
River bridges; installing drainage structures	Water pollution; impact on river flows; noise
Land acquisition	Loss of land &/or livelihood; change in land use;
Acquisition of building material from borrow pits	Change in landform and use

(a) General approach

The role of the DEO cannot be underestimated and once approved he/she shall be on the site at all times, and before the contractor begins each construction activity he/she shall give to the engineer a written statement setting out the following:

(i) The type of construction activity about to be started.

(ii) Locality where the activity will take place.

(iii) Identification of the environmental aspects and impacts that might result from the activity.

(iv) The methodology of impact prevention for each activity or aspect.

(v) The methodology of impact containment for each activity or aspect.

(vi) Identification of the emergency/disaster potential for each activity (if any) and the reaction procedures necessary to mitigate impact severity.

(vii) Treatment and continued maintenance of impacted environment.

The contractor shall programme his work in such a way that each cause and effect of a construction activity is also identified and the activity planned so as to prevent any impact from happening and shall demonstrate that he is capable of carrying out any repair and reinstatement of the damaged environment. These requirements shall be concurrent with the time constraints to produce method statements for each construction activity in compliance with the provisions of the project specifications.

The contractor shall provide such information in advance of any or all construction activities provided that new submissions shall be given to the engineer whenever there is a change or variation to the original.

The engineer may provide comment on the methodology and procedures proposed by the DEO, but he shall not be responsible for the contractor's chosen measures of impact mitigation and emergency/disaster management systems. However, the contractor shall demonstrate at inception and at least once during the contract that the approved measures and procedures function properly.

(b) Spillages

Streams, rivers and dams shall be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous products. In the event of a spillage, the contractor shall be liable to arrange for professional service providers to clear the affected area.

Responsibility for spill containment and treatment (whether hazardous or not) lies with the contractor. The individual causing a spill, or who discovers a spill, must report the incident to his/her DEO or to the engineer. The DEO will assess the situation in consultation with the engineer and act as required. In all cases, the immediate

response shall be to contain the spill. The exact treatment of polluted soil / water shall be determined by the contractor in consultation with the DEO and the engineer. Areas cleared of hazardous waste shall be re-vegetated according to the engineer's instructions.

Should water downstream of the spill be polluted, and fauna and flora show signs of deterioration or death, specialist hydrological or ecological advice will be sought for appropriate treatment and remedial procedures to be followed. The requirement for such input shall be agreed with the engineer. The costs of containment and rehabilitation shall be for the contractor's account, including the costs of specialist input.

(c) Water use and control

The contractor's use of water shall take into consideration that it is a scarce commodity, and shall be optimised. Where applicable, authorisation shall be obtained from the Department of Water Affairs (DWA) before water is drawn from streams or new boreholes developed.

The contractor shall also ensure that any stream deviations or diversions are undertaken in such a manner that the impact on the environment is minimised. Method statements shall be submitted to the engineer for comment, detailing how the work will be undertaken, what risks are foreseen and what measures will be employed to minimise such risks. Notwithstanding any comments by the engineer, no work on stream deviations or diversions can commence without written approval from DWA.

The quality, quantity and flow direction of any surface water runoff shall be established prior to disturbing any area for construction purposes. Cognisance shall be taken of these aspects and incorporated into the planning of all construction activities. Before a site is developed or expanded, it shall be established how this development or expansion will affect the drainage pattern. Recognised water users / receivers shall not be adversely affected by the expansion or re-development. No water source shall be polluted in any way due to proposed changes.

Streams, rivers, pans, wetlands, dams, and their catchments shall be protected from erosion and from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous products.

The contractor shall submit to the engineer his proposals for prevention, containment and rehabilitation measures against environmental damage of the identified water and drainage systems that occur on the site. Consideration shall be given to the placement of sedimentation ponds or barriers where the soils are of a dispersive nature or where toxic fluids are used in the construction process. The sedimentation ponds must be large enough to contain runoff so that they function properly under heavy rain conditions.

(d) Alien vegetation

The contractor shall be responsible for the removal of alien vegetation disturbed by road construction activities within and outside the road reserve. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for or from road construction has been stored temporarily. This responsibility shall continue for the duration of the defects notification period.

(e) Dust control

Dust caused by strong winds shall be controlled by means such as water spray vehicles and applied at sufficient frequency so as not to cause nuisance to adjacent habitation or affect farming activities or natural vegetation. Vegetation cover should also be kept for as long as possible to reduce the area of exposed surfaces. Dust emissions from batching and screening plants shall be subject to the relevant legislation and shall be the subject of inspection by the relevant authorities.

(f) Noise control

The contractor shall endeavour to keep noise generating activities to a minimum. Noises that could cause a major disturbance, for instance blasting and crushing activities, should only be carried out during daylight hours. Should noise generating activities have to occur at night the people in the vicinity of the noise-generating activity shall be warned about the noise well in advance and the activities kept to a minimum. Relevant legislation shall also be taken into consideration, and any practical mitigation measures adopted.

(g) Energy consumption

The contractor shall take into consideration the impacts of high energy consumption, both from a cost and emissions point of view. Energy use shall be minimised, and where possible, alternative energy sources such as solar utilised.

Furthermore, the contractor shall undertake a study of the consumption of carbon units his chosen method of construction produces in the execution of his programme. In conjunction with the engineer who will provide complete cooperation in this study, a month by month output shall be compiled and efforts made to see how these outputs can be curtailed and reduced.

C 1007 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIES

The contractor shall undertake "good housekeeping" practices during construction as stated in the COLTO Standard Specifications for Roads and Bridges and the GCC 2010. This will help avoid disputes on responsibility and allow for the smooth running of the contract as a whole. Good housekeeping extends beyond the wise practice of construction methods that leaves production in a safe state from the ravages of weather to include the care for and preservation of the environment within which the site is situated.

The construction activities addressed below shall become part of the contractor's obligations regarding his programme of work and incorporated into the required method statements for workmanship and quality control.

a) Site establishment

i) <u>Site Plan</u>

The site refers to an area with defined limits on which the project is located. The contractor shall establish his construction camps, offices, workshops, staff accommodation and testing facilities on the site in a manner that does not adversely affect the environment. However, before any site establishment can begin, the contractor shall submit to the engineer for his approval, plans of the exact location, extent and construction details of these facilities and the impact mitigation measures the contractor proposes to put in place.

The plans shall detail the locality as well as the layout of the waste management facilities for litter, kitchen refuse, sewage and workshop-derived effluents. The site offices should not be sited in close proximity to steep areas, as this will increase soil erosion. Preferred locations would be flat areas along the route. If the route traverses water courses, streams and rivers, it is recommended that the offices, and in particular the ablution facilities, aggregate stockpiles, spoil areas and hazardous material stockpiles are located as far away as possible from any water course. Regardless of the chosen site, the contractor's intended mitigation measures shall be indicated on the plan. The site plan shall have been submitted and approved before establishment commences. Detailed, electronic colour photographs shall be taken of the proposed site before any clearing may commence. These records are to be kept by the engineer for consultation during rehabilitation of the site in order that rehabilitation is, as a minimum, done to a standard similar to pre-construction activities.

ii) <u>Vegetation</u>

The contractor has a responsibility to inform his staff of the need to be vigilant against any practice that will have a harmful effect on vegetation.

The natural vegetation encountered on the site is to be conserved and left as intact as possible. Vegetation planted at the site shall be indigenous and in accordance with instructions issued by the engineer. Only trees and shrubs directly affected by the works, and such others as may be indicated by the engineer in writing, may be felled or cleared. In wooded areas where natural vegetation has been cleared out of necessity, the same species of indigenous trees as were occurring shall be re-established. Protected trees may not be removed without a permit from the Department of Agriculture, Forestry and Fisheries.

Contravention of a notice of listed protected tree species under the National Forests Act, 1998 is regarded as a first category offence that may result in a fine or imprisonment for a period up to three years, or to both a fine and imprisonment. (No trees has been specified)

Rehabilitation shall be undertaken using indigenous tree, shrub and grass species. Any proclaimed weed or alien species that propagates during the contract period shall be cleared by hand before seeding.

Fires shall only be allowed in facilities or equipment specially constructed for this purpose. The need for a firebreak shall be determined in consultation with the engineer and the relevant authorities, and if required a firebreak shall be cleared and maintained around the perimeter of the camp and office sites. The contractor's staff shall at no time make fires for purposes of keeping out the cold unless they are contained in purpose-built containers capable of preventing runaway fires if knocked over and the ashes collected and safely and environmentally disposed of on a daily basis.

iii) Water management

Water for human consumption shall be available at the site offices and at other convenient locations on site.
All effluent water from the camp/office sites shall be disposed of in a properly designed and constructed system, situated so as not to adversely affect water sources (streams, rivers, pans, dams etc). Only domestic type wastewater shall be allowed to enter this system.

iv) Heating and cooking fuel

The contractor shall provide adequate facilities for his staff so that they are not encouraged to supplement their comforts on site by accessing what can be taken from the natural surroundings. The contractor shall ensure that energy sources are available at all times for construction and supervision personnel for heating and cooking purposes.

b) Sewage management

Particular reference in the site establishment plan shall be given to the treatment of sewage generated at the site offices, site laboratory and staff accommodation and at all localities on the site where there will be a concentration of labour. Sanitary arrangements should be to the satisfaction of the engineer, the local authorities and legal requirements.

Safe and effective sewage treatment will require one of the following sewage handling methods: septic tanks and soak-aways, dry-composting toilets such as "enviro loos", or the use of chemical toilets which are supplied and maintained by a specialist service provider. The type of sewage management will depend on the geology of the area selected, the duration of the contract and proximity (availability) of providers of chemical toilets. Should a soak-away system be used, it shall not be closer than 800 metres from any natural water course or water retention system. The waste material generated from these facilities shall be serviced on a regular basis. The positioning of the chemical toilets shall be done in consultation with the engineer.

Toilets and latrines shall be easily accessible and shall be positioned within walking distance from wherever employees are employed on the works. Use of the veld for this purpose shall not, under any circumstances, be allowed.

Outside toilets shall be provided with locks and doors and shall be secured to prevent them from blowing over. The toilets shall also be placed outside areas susceptible to flooding. The contractor shall arrange for regular emptying of toilets and shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the engineer.

c) Waste management

The contractor's intended methods for waste management shall be outlined and implemented at the outset of the contract, and shall be to the satisfaction of the engineer. Opportunities for avoiding, reducing, reusing and recycling of materials should be identified upfront, as should constraints for their implementation. All personnel shall be instructed to dispose of all waste in the proper manner.

i) Solid waste

Solid waste shall be stored in an appointed area in covered, tip-proof metal drums or similar container for collection and disposal. Disposal of solid waste shall be at a licensed landfill site or at a site approved by the relevant authority in the event that an existing operating landfill site is not within reasonable distance from the project area. No waste shall be burned or buried at or near the project area.

ii) Litter

No littering by construction workers shall be allowed and any locality where motorists are encouraged or forced to stop shall be effectively controlled for litter collection. During the construction period, the various contractor's facilities shall be maintained in a neat and tidy condition and the site shall be kept free of litter. Measures shall be taken to reduce the potential for litter and negligent behaviour with regard to the disposal of all refuse. At all places of work the contractor shall provide litter collection facilities for later safe disposal at approved sites.

Particular emphasis on litter control measures shall apply at stop/go facilities.

iii) Hazardous waste

Hazardous waste such as oils shall be disposed of at an approved landfill site. Special care shall be taken to avoid spillage of bitumen products such as binders or pre-coating fluid to avoid water-soluble phenols from entering the ground or contaminating surface water.

Under no circumstances shall the spoiling of bituminous products on the site, over embankments, in borrow pits or any burying, be allowed. Unused or rejected bituminous products shall be returned to the supplier's production plant. Any spillage of bituminous products shall be attended to immediately and affected areas shall be promptly reinstated to the satisfaction of the engineer.

iv) Construction and demolition waste

The opportunity for recycling and reuse of construction and demolition waste as fill for road embankments, land reclamation and drainage control must first be explored and take priority before the option of declaring these materials a 'waste'.

The contractor is encouraged to actively engage with authorities and landowners adjacent to the site and identify where such 'waste' materials can be usefully deployed to repair existing environmentally damaged areas such as erosion dongas.

d) Control at the workshop

The contractor's management and maintenance of his plant and machinery will be strictly monitored according to the criteria given below, regardless of whether it is serviced on the site (i.e. at the place of construction activity or at a formalised workshop).

i) Hazardous Material Storage

Petrochemicals, oils and identified hazardous substances shall only be stored under controlled conditions. All hazardous materials such as bitumen binders shall be stored in a secured, appointed area that is suitably fenced, bunded and has restricted entry. Storage of bituminous products shall only take place using suitable containers to the approval of the engineer.

The contractor shall provide proof to the engineer that relevant authorisation to store such substances has been obtained from the relevant authority. In addition, hazard signs indicating the nature of the stored materials shall be displayed on the storage facility or containment structure. Before containment or storage facilities can be erected the contractor shall furnish the engineer with details of the preventative measures he proposes to install in order to mitigate pollution of the surrounding environment from leaks or spillage. The preferred method shall be a concrete floor that is bunded. Any deviation from the method will require proof from the relevant authority that the alternative method proposed is acceptable to that authority. The proposals shall also indicate the emergency procedures in the event of misuse or spillage that will negatively affect an individual or the environment.

ii) Fuel and gas storage

The contractor shall take cognisance of the limits set by legislation for the storage of fuels and acquire the necessary authorisation for storage capacity beyond these. All fuel shall be stored in a secure area in steel tanks supplied and maintained by the fuel suppliers. An adequate bund wall, 110% of volume, shall be provided for fuel and diesel areas to accommodate any leakage spillage or overflow of these substances. The area inside the bund wall shall be

lined with an impervious lining to prevent infiltration of the fuel into the soil. Any leakage, spillage or overflow of fuel shall be attended to without delay.

Gas welding cylinders and LPG cylinders shall be stored chained in a secure, well-ventilated area exterior to any building wall.

iv) Oil and lubricant waste

Used oil, lubricants and cleaning materials from the maintenance of vehicles and machinery shall be collected in a holding tank and sent back to the supplier. Water and oil should be separated in an oil trap. Oils collected in this manner, shall be retained in a safe holding tank and removed from site by a specialist oil recycling company for disposal at approved waste disposal sites for toxic/hazardous materials. Oil collected by a mobile servicing unit shall be stored in the service unit's sludge tank and discharged into the safe holding tank for collection by the specialist oil recycling company.

All used filter materials shall be stored in a secure bin for disposal off site. Any contaminated soil shall be removed and replaced. Soils contaminated by oils and lubricants shall be collected and disposed of at a facility designated by the local authority to accept contaminated materials.

e) Clearing the site

In all areas where the contractor intends to, or is required to clear the natural vegetation and soil, either within the road reserve, or at designated or instructed areas outside the road reserve, a plan of action shall first be submitted to the engineer for his approval. Working areas shall be clearly defined and demarcated on site to minimise the construction footprint. 'No-go- areas' and other sensitive areas shall also be clearly demarcated on site, and staff must be made aware of them.

The plan of action shall contain a photographic record and chainage/land reference of the areas to be disturbed. This shall be submitted to the engineer for his records before any disturbance/stockpiling may occur. The record shall be comprehensive and clear, allowing for easy identification during inspections.

f) Soil management

i) Topsoil

Topsoil shall be removed from all areas where physical disturbance of the surface will occur and shall be stored and adequately protected. The contract will provide for the stripping and stockpiling of topsoil from the site for later re-use. Topsoil is considered to be the natural soil covering, including all the vegetation and organic matter. Depth may vary at each site. The areas to be cleared of topsoil shall include all storage areas. All topsoil stockpiles and windrows shall be maintained throughout the contract period in a weed-free condition. Weeds appearing on the stockpiled or windrowed topsoil shall be removed by hand. Soils contaminated by hazardous substances shall be disposed of at an approved waste disposal site. The topsoil stockpiles shall be stored, shaped and sited in such a way that they do not interfere with the flow of water to cause damming or erosion, or itself be eroded by the action of water. Stockpiles of topsoil if they are to be left for longer than 6 months, shall be analysed, and if necessary, upgraded before replacement. Stockpiles shall be protected against infestation by weeds.

The contractor shall ensure that no topsoil is lost due to erosion – either by wind or water. Areas to be top-soiled and grassed shall be done so systematically to allow for quick cover and reduction in the chance of heavy topsoil losses due to unusual weather patterns. The contractor's programme shall clearly show the proposed rate of progress of the application of topsoil and grassing. The contractor shall be held responsible for the replacement, at his own cost, for any unnecessary loss of topsoil due to his failure to work according to the progress plan approved by the engineer. The contractor's responsibility shall also extend to the clearing of drainage or water systems within and beyond the boundaries of the road reserve that may have been affected by such negligence.

ii) Subsoil

The subsoil is the layer of soil immediately beneath the topsoil. It shall be removed, to a depth instructed by the engineer, and if not used for road building it shall be stored and maintained separately from the topsoil so that neither stockpile is contaminated by the other. This soil shall be used for rehabilitation purposes by first spreading it over the excavated slopes without interfering with or contaminating the stockpiled topsoil.

Whilst in stockpile it shall be maintained free from erosion and weed infestation in the same way as for topsoil stockpile maintenance.

g) Earthworks and layer works

This section includes all construction activities that involve the mining of all materials, and their subsequent placement, stockpile, spoil, treatment or batching, for use in the permanent works, or temporary works in the case of deviations. Before any stripping prior to the commencement of construction, the contractor shall have complied with the requirements of this EMPl. In addition, the contractor shall take cognisance of the requirements set out below.

i) Quarries and borrow pits

The contractor's attention is drawn to the requirement of the Department of Mineral Resources, that before entry into any quarry or borrow pit, an EMPr for the establishment, operation and closure of the quarry or borrow pit shall have been approved by the Department. It is the responsibility of the contractor to ensure that he is in possession of the approved EMPr or a copy thereof, prior to entry into the quarry or borrow pit. The conditions imposed by the relevant EMPr are legally binding on the contractor and may be more extensive and explicit than the requirements of this specification. In the event of any conflict occurring between the requirements of the specific EMPr and these specifications the former shall apply. The cost of complying with the requirements shall be deemed to be included in existing rates in the Pricing Schedule.

ii) Excavation, hauling and placement

The contractor shall provide the engineer with detailed plans of his intended construction processes prior to starting any cut or fill or layer. The plans shall detail the number of personnel and plant to be used and the measures by which the impacts of pollution (noise, dust, litter, fuel, oil and sewage), erosion, vegetation destruction and deformation of landscape will be prevented, contained and rehabilitated. Particular attention shall also be given to the impact that such activities will have on the adjacent built environment. The contractor shall demonstrate his "good housekeeping", particularly with respect to closure at the end of every day so that the site is left in a safe condition from rainfall overnight or over periods when there is no construction activity.

iii) Spoil sites

The contractor shall be responsible for the safe siting, operation, maintenance and closure of any spoil site he uses during the contract period, including the defects notification period. This shall include existing spoil sites that are being re-entered. Before spoil sites may be used proposals for their locality, intended method of operation, maintenance and rehabilitation shall be given to the engineer for his approval. The location of these spoil sites shall have signed approval from the affected landowner before submission to the engineer. No spoil site shall be located within 500m of any watercourse. A photographic record shall be kept of all spoil sites for monitoring purposes. This includes before the site is used and after re-vegetation.

The use of approved spoil sites for the disposal of hazardous or toxic wastes shall be prohibited unless special measures are taken to prevent leaching of the toxins into the surrounding environment. Such special measures shall require the approval of the relevant provincial or national authority. The same shall apply for the disposal of solid waste generated from the various camp establishments. The engineer will assist the contractor in obtaining the necessary approval if requested by the contractor.

Spoil sites will be shaped to fit the natural topography. These sites shall receive a minimum of 75mm topsoil and be grassed with the recommended seed mixture. Appropriate grassing measures to minimise soil erosion shall be undertaken by the contractor. This may include both strip and full sodding. The contractor may motivate to the engineer for other acceptable stabilising methods. The engineer may only approve a completed spoil site at the end of the defects notification period upon receipt from the contractor of a landowner's clearance notice and an engineer's certificate certifying slope stability.

iv) Stockpiles

The contractor shall plan his activities so that materials excavated from borrow pits and cuttings, in so far as possible, can be transported direct to and placed at the point where it is to be used. However, should temporary stockpiling become necessary, the areas for the stockpiling of excavated and imported material shall be indicated

and demarcated on the site plan submitted in writing to the engineer for his approval, together with the contractor's proposed measures for prevention of environmental damage, containment and subsequent rehabilitation.

The areas chosen shall have no naturally occurring indigenous trees and shrubs present that may be damaged during operations. Care shall be taken to preserve all vegetation in the immediate area of these temporary stockpiles. During the life of the stockpiles the contractor shall at all times ensure that they are positioned and sloped to create the least visual impact, constructed and maintained so as to avoid erosion of the material and contamination of surrounding environment and kept free from all alien/undesirable vegetation.

After the stockpiled material has been removed, the site shall be re-instated to its original condition. No foreign material generated / deposited during construction shall remain on site. Areas affected by stockpiling shall be landscaped, top soiled, grassed and maintained at the contractor's cost until clearance from the engineer and the relevant national authority is received.

Material milled from the existing road surface that is temporarily stockpiled in areas approved by the engineer within the road reserve, shall be subject to the same condition as other stockpiled materials. Excess materials from windrows, in situ milling or any detritus of material from road construction activities may not be swept off the road and left unless specifically instructed to do so in the contract documentation or under instruction from the engineer.

In all cases, the engineer shall approve the areas for stockpiling and disposal of construction rubble before any operation commences and shall approve their closure only when they have been satisfactorily rehabilitated.

v) Blasting activities

Wherever blasting activity is required on the site (including quarries and/or borrow pits) the contractor shall rigorously adhere to the relevant statutes and regulations that control the use of explosives. In addition, the contractor shall, prior to any drilling of holes in preparation for blasting, supply the engineer with a risk assessment and locality plan of the blast site on which shall be shown the zones of influence of the ground and air shock-waves and expected limits of fly-rock. The plan shall show each dwelling, structure and service within the zones of influence and record the existing positions and conditions of the dwellings/structures/services including, lengths and widths of cracks, as well as the condition of doors, windows, roofing, wells, boreholes etc. The contractor, alone, shall be responsible for any costs that can be attributed to blasting activities, including the collection of fly-rock from adjacent lands and fields. The submission of such a plan shall not in any way absolve the contractor from his responsibilities in this regard. The contractor shall also indicate to the engineer the manner in which he intends to notify the adjacent communities and/or road users the times and delays to be expected for each individual blast.

h) On site plant

i) Crusher, screening plants and concrete batching plants

Crushing plants and concrete batching plants, whether sited inside or outside of defined quarry or borrow pit areas, shall be subject to the requirements of the applicable industrial legislation that governs gas and dust emissions into the atmosphere. Such sites will be the subject of regular inspections by the relative authorities during the life of the project. In addition, the selection, entry onto, operation, maintenance, closure and rehabilitation of such sites shall be the same as for those under section C1007(g)(i) of this EMPl, with the exception that the contractor shall provide additional measures to prevent, contain and rehabilitate against environmental damage from toxic/hazardous substances. In this regard the contractor shall provide plans that take into account such additional measures as concrete floors, bunded storage facilities, linings to drainage channels and settlement dams. Ultimate approval of these measures shall be from the relevant national authority, as shall approval of closure. The engineer will assist the contractor in his submissions to the relevant authority.

Screening activities shall be undertaken so that dust and noise is minimised. This can be done by carefully choosing the site for the activity, and by using slightly damp material.

Effluent from concrete batch plants and crusher plants shall be reused where possible or treated in a suitable designated sedimentation dam to the legally required standards to prevent surface and groundwater pollution. The designs of such a facility should be submitted to the engineer for approval.

The contractor shall invite the relevant department to inspect the site within 2 months after any plant is commissioned and at regular intervals thereafter, not exceeding 12 months apart.

ii) Asphalt Plant

Asphalt plants are considered to be one of the scheduled processes listed in the Environmental Impact Assessment Regulations of 2010. The activity triggered by the asphalt for road construction purposes is activity 26 of GN. R. 545,which states: "*Commencing of an activity, which requires an atmospheric emission license in terms of Section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004) except where Activity 28 in Notice No R544 of 2010 applies."* Commencing with activity 26 of GN R. 545 requires Scoping and Environmental Impact Reporting (S&EIR) in order to obtain an environmental authorisation. In the event the use of an on-site asphalt plant is considered the contractor shall be responsible to obtain the necessary permit from the Department of Environmental Affairs, regardless of where the site is situated. **(No Asphalt plant is envisaged for this project)**

Operation of the plant shall conform to the same requirements as for a crushing plant or concrete batching plant under C1007(h)(i) above.

C 1008 AREAS OF SPECIFIC IMPORTANCE

Any area, as determined and identified within the project documents as sensitive or of special interest within the site shall be treated according to the express instructions contained in these specifications or the specific, approved EMPr. The contractor may offer alternative solutions to the engineer in writing should he consider that construction will be affected in any way by the hindrance of the designated sensitive area or feature. However, the overriding principle is that such defined areas requiring protection should not be changed. Every effort to identify such areas within the site will have been made prior to the project going out to tender. The discovery of other sites with archaeological or historical interest that have not been identified shall receive ad hoc treatment.

a) Archaeological sites

If an artefact on site is uncovered, work in the immediate vicinity shall be stopped immediately. The contractor shall take reasonable precautions to prevent any person from removing or damaging any such article and shall immediately upon discovery thereof inform the engineer of such discovery. The South African Heritage Resource Agency (SAHRA) is to be contacted, and a SAHRA-registered archaeological consultant may undertake the necessary work involved in confirming the find and advising on how it should be preserved or removed. Work may only resume once clearance is given in writing by the archaeologist.

If a grave or midden is uncovered on site, or discovered before the commencement of work, then all work in the immediate vicinity of the graves/middens shall be stopped and the engineer informed of the discovery. The South African Heritage Resource Agency and the South African Police Services (SAPS) should be contacted and in the case of graves, arrangements made for an undertaker to carry out exhumation and reburial. The undertaker will, together with SAHRA, be responsible for attempts to contact family of the deceased and for the place where the exhumed remains can be re-interred.

C 1009 REHABILITATION

The contractor shall be responsible for the re-establishment of grass within the road reserve boundaries for all areas disturbed during construction. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for, or from, construction has to be stored temporarily, and designated or instructed areas outside the road reserve. It also includes the area where site offices were erected which may require rehabilitation at the end of the contract. All construction material, including concrete slabs and barbecue (braai) areas shall be removed from the site on completion of the contract unless written approval from the relevant landowner demonstrates it is to be left in place.

Responsibility for re-establishment of vegetation shall extend until expiry of the defect notification period. However, the employer reserves the right to continue holding retention monies (or not releasing guarantees in lieu of retention) depending upon the state of cover at the end of the defect notification period. Such extension may continue until closure of the relevant quarry or borrow pit has been secured,

Rehabilitation of affected areas should be undertaken as early as possible when the relevant activities are done in order to reduce further environmental damage. All re-vegetation should be undertaken using indigenous

vegetation. The standard of rehabilitation should be to the satisfaction of the engineer and the relevant authorities. The Department of Minerals Resources will only issue closure certificates for borrow pits and quarries when they are satisfied with the rehabilitation undertaken. It should also be noted that in some cases there is a requirement for a final environmental audit covering the extent of the project.

C 1010 RECORD KEEPING

The engineer and the DEO will continuously monitor the contractor's adherence to the approved impact prevention procedures and the DEO shall submit regular written reports to the ECO and to the engineer, at least once a month. The engineer shall issue to the contractor a notice of non-compliance whenever transgressions are observed. The DEO shall document the nature and magnitude of the non-compliance in a designated register, the action taken to discontinue the non-compliance, the action taken to mitigate its effects and the results of the actions. The non-compliance shall be documented and reported to the engineer in the monthly report.

Copies of any authorisations or EMPrs (including those for specific borrow pits or quarries used on the project) shall be kept on site and made available for inspection by visiting officials from the employer, relevant environmental departments or internal/external auditors.

C 1011 COMPLIANCE AND PENALTIES

The contractor shall act immediately when a notice of non-compliance is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a dedicated register and the response noted with the date and action taken. This record shall be submitted with the monthly reports and an oral report given at the monthly site meetings.

Any non-compliance with the agreed procedures of the EMPr and this EMPl is a transgression of the various statutes and laws that define the manner by which the environment is managed and, therefore, any avoidable non-compliance, dependant on severity, may be considered sufficient grounds for contact to be made with relevant provincial or national authorities to invite their sanction.

The engineer's decision with regard to what is considered a violation, its seriousness and the action to be taken against the contractor shall be final. Failure to redress the cause shall be reported to the relevant authority. The responsible provincial or national authority may ensure compliance and impose penalties relevant to the transgression as allowed within statutory powers.

Table 7/1: Mechanisms that Cause Environmental Impacts during Construction Activities

Section	Contents	Environmental Impacts				
		Pollution Type	**Deformation of Landscape**	**Soil erosion**	**Alien Vegetation**	**Sensitive Areas**
C1.3	Camp Establishment	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C1.4	Housing, Offices and laboratories	Waste treatment Hazardous waste Water supply Spillage Storage Noise/lights	Selection of site Preserve indigenous vegetation Preserve topsoil Demarcate sensitive areas	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C1.5	Accommodation of Traffic	Waste treatment Hazardous waste Water supply Spillage Storage Noise/lights Dust control	Selection of site Preserve indigenous vegetation Preserve topsoil Demarcate sensitive areas Maintenance of windrows	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C1.6	Clearing and grubbing	Waste treatment Hazardous waste Water supply Noise /lights Dust control	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Protection of indigenous vegetation Preserve topsoil	None identified
C1.7	Overhaul/	Spillage Storage Noise/lights Dust control Exhaust fumes Washing waste	Turning circles Parking areas	Restrict access to sensitive areas	Protection of indigenous vegetation Preserve topsoil	None identified
C3.1 – C3.3	Drainage	Waste treatment Hazardous waste Water supply Spillage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified

		Storage				
C4.1	Borrow pits	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C4.1 .1 – C4.1.21	Stockpiling	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C4.2	Cut Material / Mass Earthworks	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C5.3	Pavement layers	Waste treatment Hazardous waste Water supply Spillage Storage Noise / lights Dust control	Selection of site Preserve indigenous vegetation Preserve topsoil Demarcate sensitive areas Maintenance of windrows	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C8.1 – C11.1	Asphalt works / sealing operations	Waste treatment Hazardous waste Water supply Spillage Storage Noise / lights Dust control Smoke control Storage of materials	Selection of site Preserve indigenous vegetation Preserve topsoil Turning circles Parking areas	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil	None identified

C11.3 – C11.9	Ancillary roadworks	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C13.1	Structures	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified
C6.1 – C7	Concrete pavements etc	Waste treatment Hazardous waste Water supply Spillage Storage	Selection of site Preserve indigenous vegetation Preserve topsoil	Selection of site Preserve indigenous vegetation Preserve topsoil	Preserve indigenous vegetation Preserve topsoil Management of weeds	None identified

1. 3.3 PARTICULAR SPECIFICATIONS

PART D: DAYWORK

PART D: DAYWORK

This part of the Particular Specifications deals with the provision for daywork in the Schedule of Quantities. Rates for daywork shall be entered in the Schedule of Quantities in accordance with the following specifications.

2. D1. SCOPE

According to Clause 6.5 of the General Conditions of Contract 2015, certain work may be carried out using rates tendered in the daywork schedule. A schedule of personnel, plant and equipment which may be necessary to perform work on a daywork basis is included in the Schedule of Quantities. The quantities used in the Schedule of Quantities are for tender evaluation purposes only and the use or not of these items shall not constitute a variation in terms of Clause 6.3 of the General Conditions of Contract 2015.

No work will be paid for as daywork without the written instruction or approval of the Employer's Agent.

3. D2. TYPE OF WORK

The Employer's Agent may order daywork in certain cases where it is necessary to vary or to extend the works due to new or unforeseen circumstances to such an extent that the tendered rates for specific items of work are no longer applicable, or where no suitable combination of tendered rates can be used to pay for such work.

As a general rule, applicable rates for additional work items will be agreed between the Contractor and the Employer's Agent. Daywork will only be used in exceptional circumstances.

4. D3. MATERIALS

Materials for use in works carried out under daywork shall be purchased by the Contractor who shall also arrange for delivery to site, and shall be responsible for any other requirements associated with specific materials. A Provisional Sum has been allowed in Section D of the Schedule of Quantities for daywork materials. The Contractor shall enter a tendered percentage in the Schedule of Quantities to cover his handling costs and profit, as per other provisional and prime cost sums in this Contract.

Materials shall be paid for using the method described in C2.1, 'Pricing Instructions'. No contract price adjustment will be applicable to materials.

The Contractor shall submit proof of ownership for any materials used in daywork with his daywork claim to the Employer's Agent. Further, if specific materials are required for daywork, quotations will be called for as per Clause 6.5.2 of the General Conditions of Contract 2015.

D4. CONSTRUCTION PLANT HIRE

Where daywork is ordered, the tendered rates for plant hire in Section D of the Schedule of Quantities shall be used in calculating the payment due for any plant required to execute the daywork. If no rate is included in the Schedule of Quantities for a particular piece of equipment, and where no other rate or combination of rates would provide suitable compensation, then the daywork method of payment described in Clause 6.5.1.3 of the General Conditions of Contract 2015 will be used.

The tendered rates for each item of constructional plant shall include for all operating costs associated with the said item of plant. Such costs are deemed to include fuel, re-fuelling costs, lubrication and routine servicing / maintenance, breakdowns and spares, all overhead costs, site management costs and administration costs. The tendered rates shall also include the plant operator and the general supervision of the plant while it is engaged in the daywork.

5. D5. SALARIES AND WAGES OF WORKMEN

The salaries and wages of workmen executing daywork shall be paid for using the tendered rates in the Schedule of Quantities. The tendered rates shall include for all costs associated with the employment of personnel, including salaries, wages, allowances, workmen's compensation, medical aid and pension contributions, government levies and taxes, training costs and any costs associated with living on the site. The tendered rates shall also include for the transportation of the workmen to the site of the daywork.

All overhead costs, administration costs, site management costs and the Contractor's profit are deemed to be covered by the daywork rates and no additions or mark ups will be made to the tendered rates.

The tendered rates shall also include any hand tools normally associated with the workmen's job description e.g. picks, shovels, hammers, saws, spirit levels, etc. The tendered rate for labourers shall also include for the casual supervision by a gang boss or foreman. Only when specifically called for by the Employer's Agent, will payment be made for the use of a gang boss or foreman supervising on a continuous basis.

6. D6. MEASUREMENT AND PAYMENT

The following principles shall also apply to the measurement and payment of daywork.

The unit of measurement for plant shall be the number of Vibroclock hours worked and each item of plant shall be fitted with a Vibroclock, the cost of which shall be included in the rates. Excessive non-productive time when the engine is idling will not be paid for. Where there is ambiguity between the flywheel horsepower and mass of the machine, the flywheel horsepower shall govern the measurement category. Where width and mass are specified, mass shall govern the measurement category.

The Contractor's attention is drawn to the requirements of Clauses 6.5.3 and 6.5.4 of the General Conditions of Contract 2015 with regard to the submission of daywork's claims.

C3.3 PARTICULAR SPECIFICATIONS

PART E: OHSA 1993 HEALTH AND SAFETY SPECIFICATION

OCCUPATIONAL HEALTH AND SAFETY

PART E: OHSA 1993 HEALTH AND SAFETY SPECIFICATION

SCOPE

This specification covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy working environment for all employees, subcontractors, the Employer, the Employer's Agent, inspectors and all other persons entering the site of works.

This specification shall be read in conjunction with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993 and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Act and Construction Regulations.

In terms of the OHSA Agreement in Section C1.4 of the Contract document, the status of the Contractor as mandatary to the Employer (client) is that of an employer in his own right, responsible for compliance with all provisions of OHSA 1993 and the Construction Regulations 2014.

This specification and the Contractor's own Health and Safety Plan as well as the Construction Regulations 2014, shall be displayed on site or made available for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representatives of trade unions and any other persons entering the site of works.

E1.1 Information based on the Employer's baseline risk assessment

The information presented in this sub clause E1.1 is based on the Employer's baseline risk assessment prepared specifically for this contract.

This information describes the type of work required in terms of this contract that will be accompanied by dangers, hazards and risks which the Contractor shall be required to identify, analyse, manage, monitor and review in terms of the Health and Safety Plan and risk assessments.

This information is neither prescriptive nor exhaustive, and is provided as a guideline to Tenderers in preparing their tender submissions, and to the successful Contractor as a basis for the preparation of the site-specific risk assessments to be performed by the Contractor in terms of Construction Regulation 9.

Tenderers shall make their own assessment of the dangers, hazards and risks that can be expected during the course of this contract, which may include dangers, hazards and risks not identified in the baseline risk assessment, including those that may arise from specific methods of construction employed by the Contractor, and shall make due allowance in their tendered rates and prices for all costs related to complying with the provisions of the Act and Construction Regulations.

This information is given in good faith for the guidance of Tenderers, and no additional payment shall be made as a result of any inaccuracies, discrepancies or omissions contained therein.

The following aspects of this project will be accompanied by dangers, hazards and risks which the Contractor shall be required to identify, analyse, manage, monitor and review in terms of the Health and Safety Plan and risk assessments:

Establishment on site, and subsequent removal on completion, of facilities for both the Contractor and the Employer's Agent. This shall include the establishment of office facilities, kitchen facilities, laboratory facilities, ablution facilities, car ports, security lighting and fencing, and such other facilities as may be required by the Contractor for the storage of materials, construction vehicles, mobile plant and equipment, and for the maintenance and refuelling of construction vehicles and mobile plant. The establishment

of such facilities shall also include for the provision and installation of services for water, sewerage, and electricity, for the provision of LP gas, and for the collection and removal of waste.
Handling of furnishings, equipment and fittings for the various site establishment facilities.
Operation and maintenance of the facilities established on site.
Risks such as electrical shock, fire and burns associated with the installation, maintenance and subsequent removal of the electrical services, and the use of electricity at the site establishment facilities (e.g., use of lights, air conditioners, geysers, kettles, fridges, ovens, hot plates, microwave ovens, photocopiers, printers, computers, extractor fans, electrical machines in the laboratory and workshops, etc.).
Fall risk arising from the potential exposure of employees to falling (e.g., falling from ladders or structures, falling into trenches or excavations) during the construction of the site establishment facilities and the subsequent maintenance and removal thereof.
Operation and maintenance on the site of heavy civil engineering construction vehicles and mobile plant such as prime, tack coat and binder distributors, chip spreaders, slurry spreader boxes, excavators, front end loaders, tippers, flatbed trucks, TLBs, graders, compaction plant including small hand-operated compaction plant and equipment, water trucks, hydroseeding plant, self-propelled concrete saws, water pumps, mixers (for patching stabilisation, slurry and concrete), generators, compressors and pneumatic tools.
Use on the site of portable power tools such as drills, angle grinders, circular saws, brush cutters and chainsaws (if required).
Welding operations as possibly required by the Contractor during the erection and maintenance of the site establishment facilities, for construction vehicle and mobile plant maintenance, and during construction of the Temporary Works, including arc welding, gas welding, flame cutting and the use of LP gas torches and appliances.
Use on the site of large hand tools such as picks, pick mattocks, large mallets, crowbars, spades, shovels, pitchforks, hoes, rakes, machetes, slashers and axes.
Use on the site of small hand tools such as hammers, small mallets, screw drivers, chisels, pliers, saws, cutting knives and shears, clamps, trowels, spanners and wrenches.
Use on site of ladders and scaffolding.
Use on site of tools and equipment associated with construction vehicle and mobile plant repair, maintenance and modification.
Use on the site of hand sprayers for bitumen.
Use on site of explosives.
Blasting operations in hard rock material for cut excavation and for the in-situ treatment of the roadbed.
Handling of materials such as prefabricated concrete pipes, uPVC / HDPE pipes, scaffolding, formwork, timber planks, steel wire, nails, screws, bolts and nuts, gang-nail plates, steel reinforcement, cement bags, concrete materials, bricks, steel drainage grids, gabion baskets, hand stone, prefabricated kerbs, prefabricated duct marker blocks and kilometre posts, polyethylene sheeting, geotextile products, guardrails, treated timber posts and poles, road signs, roadstuds, grass sods, grass seeds and anti-erosion compound (if required).
Handling of cement and/or lime for stabilising purposes.
Handling of subgrade materials, topsoil, pavement layer materials and aggregates.
Handling of bituminous and heated bituminous materials such as bitumen emulsion, prime, tack coat and hot mix asphalt.
Storage and handling of flammable materials such as fuels, oils, LP gas, bitumen, adhesives, painting products including bituminous paint and road marking paint, and cleaning products.
Handling and operation of laboratory equipment such as nuclear gauges for compaction measurement, ovens, heating plates, LP gas cylinders, gas heating equipment, and compression testing machines.
Handling of laboratory chemicals and handling of laboratory samples such as concrete test cubes and soil specimens collected in the field.
Conducting of laboratory fieldwork in the work areas under construction, including testing and sample collection.
Handling of chemical fertilizers.
Storage and handling of herbicides and ant poisons (if required).
Presence of open excavations for subsoil drains, open drains, drainage structures such as manholes, stormwater pipes and inlet and outlet structures, gabion walls, services, lighting masts, road sign supports and guardrail posts. Fall risk arising from the potential exposure of employees and the public to falling into such open excavations.

Construction of excavations that may require accompanying lateral earth support provision to resulting vertical earth faces.
Drainage of excavations in order to assist with ensuring the stability of the excavations, and also to prevent water from pooling in the excavations and exposing employees and the public to the risk of drowning.
Placing and installing materials in excavations and trenches, including lifting and lowering of the materials from above and working in restricted conditions.
Backfilling and compacting excavations and trenches, including working in restricted conditions.
Erection, maintenance and use of bulk mixing plant for concrete batched on site, and the subsequent removal thereof on completion.
Installing, maintaining, relocating and removing traffic control facilities under traffic, including electrically operated traffic signal control facilities and amber flashing lights mounted on signs. Fall risk arising from the potential exposure of employees to falling during these processes, which include for the provision of floodlights supported on 9 m high poles.
Continual maintenance of the traffic accommodation facilities will be required to help ensure traffic safety, including the cleaning of delineators and temporary road signs to ensure good visibility at all times, the immediate replacement of missing or damaged delineators and temporary road signs, and the immediate reinstatement of delineators and temporary road signs that have fallen over or been moved to an unauthorised position.
Working adjacent to traffic on the existing road.
Constructing the road between sunrise and sunset using half-width traffic accommodation methods with STOP/GO traffic control and two-way communication devices.
Controlling traffic using traffic signal control facilities and two-way communication devices where half-width lane closures remain in place between sunset and sunrise.
Working with restricted access across the length of the site resulting in congested construction activities.
Working in mountainous terrain with generally restricted sight distance and overtaking opportunities, and in misty conditions.
Accessing of the work areas by construction vehicles, mobile plant and personnel from existing roads, using traffic accommodation control measures.
Accessing by the general public of residential, business, community, school and other infrastructure located directly adjacent to the Works, involving traffic and pedestrians crossing the work areas under construction.
General movement and manoeuvring of construction vehicles and mobile plant on site, including forward, turning and reversing movements, movements to exit and re-enter the trafficked lane from the work areas, loading and off-loading movements, lifting and lowering movements, towing movements, and movements taking place under conditions of restricted sight distance.
Pedestrian activity along the full length of the road. The strict control of pedestrian movements will be required during all construction activities, in order to prevent pedestrians from randomly crossing the work area or passing too close to the work area. This will be particularly important during the cut and fill widening and during the construction of the various pavement layers and the surfacing, when numerous construction vehicles and mobile plant units will be active simultaneously along the length of the work area in congested conditions using half-width construction measures.
Regular presence of livestock along P2-9 within the road reserve, including along the carriageway and shoulders.
Relatively close proximity to the road reserve boundary in certain areas of residential, business, community, school and other infrastructure.
Construction directly adjacent to the trafficked road of subsoils, drains, drainage structures, sidewalks where required, and concrete edge beams.
Removal and erection of guardrails directly adjacent to the trafficked road.
Erection and dismantling of temporary and permanent road signs, which may require the use of ladders, scaffolding and temporary propping directly adjacent to the trafficked road. Fall risk arising from the potential exposure of employees to falling during these processes.
Road marking operations carried out under traffic.
Presence of overhead powerlines above or directly adjacent to the Works.
Locating of buried services, including electrical services, using hand excavation methods, should the Contractor be required to assist the service owner with proving buried services.
Presence of service owners' personnel conducting construction and maintenance work related to their services on the site.
Assisting service owners, where required, with the relocation of services.

Installation of poles for overhead services. Fall risk arising from the potential exposure of employees to falling during the erection process, should the Contractor be required to assist the service owner with the erection process.
Potential exposure to noise caused by construction vehicles, mobile plant, and construction tools and equipment.
Potential exposure to vibration caused by construction vehicles, mobile plant, and construction tools and equipment.
Potential exposure to dust inhalation, including dust from cement (concreting, stabilisation) and lime (stabilisation), due to natural wind action, the action of construction vehicles and mobile plant and equipment, and due to the action of the various construction processes.
Potential exposure to fire, including veld and bush fires in the areas surrounding P2-9.
Potential exposure to local fauna (e.g., snakes, monkeys, dogs, feral cats, rodents) and flora (e.g., thorns, nettles) and insects (e.g., bees, wasps, spiders, ticks, mosquitoes).
Potential exposure to rabies and tick bite fever.
Exposure to natural phenomena (heat, cold, rain, wind, hail, lightning) and accompanying potential health risks such as headaches, nausea, dehydration, heat exhaustion, fainting, hypothermia, cuts and bruises, concussion, and electrical shock and burns. Increased fall risk associated with the aforementioned.
Potential exposure to infectious diseases that affect South African communities, such as the common cold, influenza, diarrhoea, gastroenteritis, cholera, pneumonia, meningitis, hepatitis, tuberculosis and HIV/AIDS.
Risks associated with failure to equip employees with protective apparel appropriate to the work they are carrying out, and failure to ensure that employees wear the appropriate protective apparel issued. Such protective apparel includes but is not restricted to reflective safety jackets, hard hats and other forms of safety headwear, safety boots, safety gloves, overalls, safety eyewear such as spectacles, goggles and face shields, safety earplugs and earmuffs, safety respiratory masks, welding gloves, masks and aprons, kidney belts, safety harnesses, and disposable safety apparel, as applicable.
Risks associated with failure to treat injuries suffered on site in a timely manner.
Risks related to general safety and security on site.

Additional risks may arise from specific methods of construction selected by the Contractor which are not necessarily covered in the above.

The site specific baseline risk assessment is included below.

RISK ASSESSMENT MATRIX

	WRITTEN BY	REVIEWED BY	APPROVED BY
NAME			
SIGNATURE			
PROJECT/SITE			
SCOPE OF WORK	***SPECIAL MAINTENANCE OF P23/3 (R707) ROAD BETWEEN LINDLEY AND PETRUSTEYN***		
DATE WRITTEN		**REVIEW DATE**	

A INJURY SEVERITY		**B FREQUENCY of OCCURRENCE**	
0	No injury	**0**	Has not occurred in last two years
2	Minor laceration, wound (first aid case)	**2**	Occurs very seldom
4	More severe injury medical attention	**4**	Occurs occasionally
6	Serious injuries, broken bones, amputation, trauma	**6**	Occurs often
8	Loss of life / fatality	**8**	Could / has happened/ fatality

RATING	
RISK CLASSIFICATION	**RISK VALUE**
LOW	**0➔6**
MEDIUM	**7➔16**
HIGH	**17➔32**
CRITICAL	**33➔40**

C POTENTIAL DAMAGE / LOSS		**D ENVIRONMENT**		
0	No damage, costs R10 – 100	**0**	No effect	Spillage, noise, water, dust / vapours/ fauna and flora
2	Minor damage, costs R100 – 1000	**2**	Minor effect	
4	Med damage, stoppage costs R1000 – 5000	**4**	Serious effect (Short term)	
6	More serious damage/ loss and delay costs R5000 - +	**6**	Very serious effect (Long Term)	
8	Severe damage/ loss and long term stoppage/delay high costs	**8**	Catastrophic effect	

ACTION REQUIRED		
LOW	**Supervision, training, certification, method statement/risk assessments, safe work procedures training, toolbox talks.**	**Good instruction.**
MEDIUM	**Competent supervision, training certification, method Statement/risk assessments, safe work procedures training, Planned task observations, toolbox talks.**	**Change method, mitigate**
HIGH	**Competent supervision, Special training certification, method statement/risk assessments, safe work procedures training, Planned task observation, toolbox talks.**	**Change method, mitigate.**
CRITICAL	**Close competent supervision, Special training certification, method statement/risk assessments, safe work procedures, Planned task/job observations, work permits, training and toolbox talks.**	**Intolerable, change method, transfer risk.**

RISK ASSESSMENT								**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION** **A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**
Site clearance and establishment • Site layout • Removal of unwanted material • Erection of site office • Delivery of mobile plant and machinery	• Moving machinery and mobile plant • Striking employees • Noise • Tripping over tools • Excavation work • Erecting of site office	• Serious injuries • Ear damage • Cuts and bruises • Pollution • Manual Handling	***2***	***4***	***4***	***4***	***16***	• Speed limit on mobile plant/vehicles • Training of operators • Correct use of PPE • Proper channels of communication with employees • Implementation of toolbox talks/ method Statements and risk assessment. • Use of lifting technic	• Induction training will be conducted prior construction commencement to all employees on site • Site or subordinate supervisor to monitor this activity • Appointment of occupational health and safety structure • Identifying skills for training to be conducted in employees who will be responsible on daily running of the project throughout.
Work area to be kept clear of any obstruction	Trip, fall and stumble	• Injury to employee • Damage to material	**4**	**4**	**4**	**0**	**12**	Good Housekeeping	Supervisor to do visual inspections
Ensure all materials are free of any sharp edges or protruding objects	Containers, nails splinters	• Cuts and grazes	**2**	**4**	**4**	**0**	**10**	Safety gloves must be worn	Visual and physical inspections done by supervisor
Lifting and moving material	Back, hand and foot injuries	• Severe injury to persons and can cause damage to material and equipment	**4**	**4**	**4**	**0**	**12**	• Wear hand protection. • Lift materials with a straight back and bent knees. • Get assistance if material is too heavy (max 25kg). • Maintain good housekeeping. Beware of hand pinch places. • Ensure enough finger room when lowering materials to floor level. • Keep colleagues' safety in mind	On-going supervision and Planned task Observations (PTO) required

RISK ASSESSMENT									**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION**					**PREVENTATIVE MEASURES**	**CONTROLS**	
			A	**B**	**C**	**D**	**R**			
Stable foundations required for bearers or pallets and in stacking area	Bearers, stacks or palettes collapse	• Injury to employee • Damage to material	4	2	4	0	**10**	Level areas and all load bearing equipment in satisfactory condition	Physical check of stability and condition of load bearing areas and equipment	
Stacking and storage of materials to be stable	Falling load can struck employees	• Injury to employee • Damage to material	4	2	4	0	**10**	• Competent Stacking and Storage Supervisor supervises stacking. • Stacking and storage Register maintained	• Supervisor to check if load is secure • Appointment of competent Stacking and Storage supervisor • Stacking and storage register	
Working with hand tools	• Tripping over tools • Injury to employees	• Cuts and bruises • Minor injuries	***2***	***4***	***4***	***0***	***10***	• Regular checking of hand tools every day prior using it • Ensure that damaged hand tools are not used by employees until they are fixed • Ensure that correct PPE is worn by employees while working with hand tools	• Appointment of hand tools supervisor • Daily inspection of hand tools • Daily inspection of PPE worn by employees • Filling of registers on a daily basis	
Open excavation	Employees falling in	• Serious injuries	***8***	***8***	***4***	***2***	***22***	• Excavated areas to be clearly barricaded • No material will be staked less than 2m distance closely to excavated areas	• Clear walkways and path • Barricading measures be always in place	
Waste disposal excess soil and fill	Environmental damage	• Cause harm to the community at large	***4***	***4***	***2***	***8***	***18***	• Demarcated areas for wastage • All refuse will be stored in a demarcated areas	• Appointment of storage and staking supervisor • Filing of registers daily	

RISK ASSESSMENT								**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION** **A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**
Mobile plant on site (TLB/Excavator/Grader/Tipper Trucks/Bomag/Water cart/Wirtgan/)	• Vehicle overturning • Noise emissions • Emission of carbon monoxide • Striking employees • Employees falling from vehicles	• Serious injuries • Ear damage • Death • Air pollution	***8***	***8***	***8***	***2***	***26***	• Supervision and training of operators • Operators should have valid driver's licenses or competency certificates • All operators to undergo medical fitness medicals by an accredited occupational health doctor or nurse. • Use of carbon filters. • Use of correct PPE.	• Appointment of mobile plant supervisor • Filing of mobile plant register/checklists daily • Placing of sign boards where necessary
Grading	• Grader	• Falling under wheels or blade • Air Pollution	***8***	***8***	***8***	***2***	***26***	• Plant work to allow for workers and traffic in roadway • Use of carbon filters	• Prescribed PPE • Warning Signs • Safety net
Compacting	• Various Rollers	• Falling under vehicle • Run over • Flying stones • Pollution	***8***	***2***	***6***	***2***	***18***	• Daily Inspections • Warn workers to keep clear • Warning Signs • Red Flags • Warning Hooters	• Prescribed PPE • Warning Signs • Safety net
Compacting	• Vibrator	• Eye injuries • Noise exposure						• Warn workers to keep clear	• Prescribed PPE • Warning Signs • Safety net
Watering Roads	• Water Tanker	• Falling under vehicle • Run over Flying stones • Pollution	***6***	***2***	***4***	***8***	***20***	• Daily Inspections • Warn workers to keep clear • Warning Signs • Red Flags • Warning Hooters	• Prescribed PPE • Warning Signs • Safety net
No vehicles that are in an unsafe condition, may be driven on site.	Unsafe vehicle, defective brakes, lights, hooter, tyres.	Injury to employees. Damage to property	4	2	8	2	**16**	Daily check log sheet to be issued to driver/ operator	Supervisor to control

RISK ASSESSMENT									**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION** **A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Always be aware of what is going on around you including behind the vehicle	Vehicle might collide with people or other vehicles or plant	Injury to body Damage to property	8	2	8	2	**20**	Induct driver. Utilise banksman to guide vehicle.	Supervisor to control and monitor on regular basis	
The speed limit on site to be adhered to. Use Safety Belts. No hand-held phones to be used	Speeding vehicles can hit people and other vehicles and plant. Distraction using mobile phone. No restraint by belt in the event of a collision	Injuries and fatalities Damage to property	10	4	8	2	**24**	Speed limit signs to be clearly displayed and obeyed. Only hands free mobile phones may be used. Seat belts must be used at all times when driving.	Supervisor to control and also traffic safety officer to control.	
Driver to be aware of oncoming vehicles and plant when entering or leaving a site	Collisions with other vehicles and plant.	Injury to employees Fatalities Damage to property	10	4	8	2	**24**	Driver to be inducted	Supervisor to control	
Carrying passengers on the back of truck or bakkie,	Passengers falling from the truck	Injury to body and possible fatality	10	4	8	0	**22**	Induction to all drivers.No passengers are permitted on tractors, trailers, dumper, mobile cranes and bakkies on site.	Supervisor and driver to check and control	
Getting onto or off the vehicle or truck while in motion	Persons could fall off the moving vehicle.	Various injuries and possible crush beneath the vehicle	10	4	8	0	**22**	Induction to drivers and employees to only get in and out of stationary vehicles.	Supervisor and driver to check and control	
Use indicators when changing direction of vehicle	Confusion to other road users resulting in collision	Injury to people Damage to property	4	8	8	2	**22**	Induction to driver. Use of daily log sheet to check if indicators are functioning. Report faults to supervisor	Supervisor/workshop to control	
Be polite courteous and considerate to other road users	Vehicles colliding	Injury to people Damage to property	8	8	8	2	**26**	Road signs and rules of the road to be obeyed Induct driver	Site agent to control and monitor	

RISK ASSESSMENT									**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
No work is to be carried out under vehicle resting on hydraulic jacks only	Hydraulic jacks loosing pressure and collapsing	Injury to worker and possible fatality	10	2	8	0	**20**	Vehicle to be supported on blocks or trestles designed for this purpose	Supervisor to check and monitor	
For periods of driving of more than 10 hours a day, special written authorisation is to be obtained by site agent of contract	Falling asleep	Fatal injuries Damage to property	10	4	8	2	**24**	Restrict driver from driving more than 10 hours per day. No long distances at night	Site agent to control long distance trips Restrict night driving	
The engine of a vehicle resting on hydraulic jack should not be run	Vehicle may fall from jack due to vibrations	Injury to body. fatal	10	4	8	0	**22**	Induct driver and the mechanics/ maintenance workers.	Supervisor to control	
No vehicle should be left with the engine running unattended	Unauthorised driving away with vehicle	Injury to people and possible fatality Damage and loss of property	10	4	8	2	**24**	All drivers to remove keys from the ignition, apply handbrake once leaving the vehicle unattended.	Supervisor to monitor on regular basis	
All doors of vehicle must be locked at all times if the driver is not in the vehicle	Vehicles may be stolen Unauthorised usage by other personnel	Financial loss Accidents and injury	8	4	8	2	**22**	Induct drivers to lock out before leaving vehicles	Supervisor to monitor and enforce	
No driver will be allowed to operate without an appointment	Unauthorised drivers	Accidents and property damage	8	4	8	2	**22**	Supervisor to make sure that all drivers are appointed in writing.	Safety officer to verify	

RISK ASSESSMENT									**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION** **A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Construction vehicle and public vehicle driving through construction site	• Workers and public exposed to being hit by the cars	• Project interruption • Legal liability claims • Serious injuries • fatality						• Warn workers to keep clear • Use of Traffic signs. • Use of trained Flag man • Safe operating procedure. • Supervisor to ensure that workers are wearing correct PPE at all times.	• Prescribed PPE • Warning Signs • Safety net	
Working in a controlled area	• Workers being exposed to extreme climate conditions. • Workers being exposed to oncoming traffic.	• Dehydration/ hyperthermia • Accidents and incidents • Financial loss • Legal liability claims • Project interruption				.		• Warn workers to keep clear • Training on SWP and method statement/risk assessment. • Induction training. • Traffic awareness training. • Supervisor to monitor. • Provision of PPE.	• Prescribed PPE • Warning Signs • Safety net	
Stop and Go	• Oncoming traffic obvious of the road workers • Accidents and incidents • Workers being hit by oncoming traffic.	• Serious accidents • Multiple fatalities • Major financial loss • Project interruption • Legal liability claims • Property damage	6	4	6	4	***20***	• Serious accidents • Multiple fatalities • Major financial loss • Project interruption • Legal liability claims • Property damage	• Supervisor and employees ensure that all communication are un-interrupted and working at all times. Safe operating procedures. • All working operating machines to be aware of all oncoming traffic and dangers. • Induction training must be conducted. • Daily tool box talk	

RISK ASSESSMENT									**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Dual Stop and Go	• Improper communication between 2 Stop and Go point. • Vehicles hitting workers and working machine. •	• Serious accidents • Multiple fatalities • Major financial loss • Project interruption • Legal liability claims • Property damage •	6	4	6	4	***20***	• Serious accidents • Multiple fatalities • Major financial loss • Project interruption • Legal liability claims • Property damage	• Supervisor and employees ensure that all communication are un-interrupted and working at all times. Safe operating procedures. • All working operating machines to be aware of all oncoming traffic and dangers. • Induction training must be conducted. • Daily tool box talk	
Working with hand tools	• Tripping over tools	• Cuts, minor injuries • Eyes, foot and hand injuries	***2***	***8***	***2***	***0***	***12***	• Safety rep to check tools daily • Employees to be given gloves, boots and have to wear them as per procedures	• Safety rep check daily on PPE worn • Daily hand tools filing of registers	
Portable electrical equipment and tools	• Injury by flying objects • Noise emission	• Minor injuries • Serious injuries • Ear damage	***2***	***4***	***4***	***0***	***12***	• Training of operators • Use of correct PPE	• Appointment of portable electrical equipment and tools • Daily checks on tools and equipment • Induction on employees of how to properly use portable electrical tools • Safety rep to ensure that employees use right tool for the right job and correct PPE is worn	
Waste disposal General refuse	• Environmental damage	• Minor environment	***2***	***4***	***2***	***4***	***12***	• All refuse will be stored in a demarcated areas	• Stacking and storage supervisor to daily supervise this activity	
Welfare	• Drinking water	• Diarrhoea	***8***	***8***	***8***	***8***	***32***	• Do not drink from river • Clean container daily	• Provide clean drinking water	

RISK ASSESSMENT								**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION**					**PREVENTATIVE MEASURES**	**CONTROLS**
			A	**B**	**C**	**D**	**R**		
House keeping	• Rubbish Bins	• Environmental hazard	***8***	***6***	***6***	***6***	***26***	• Provide dirt bins • Remove daily	• Appropriate bins to be provided before commencing of project.
Extinguishers	• Under pressure	• Explosion	***3***	***3***	***3***	***1***	***10***	• Monthly inspection • Yearly service • Training	• Fire Extinguisher signs
All noisy plant identified – Noise Survey	• Noise	• Hearing Loss	***3***	***3***	***3***	***3***	***12***	• Signage • Training • Noise Reduction Measures	• Earmuff Signs • Earmuffs as required
Storage of materials on site	• Collapse of material • Injury to trespassers • End skeletal from lifting	• Minor injuries • Serious injuries • Death	***2***	***4***	***2***	***0***	***8***	• Storage areas will be fenced and secured • Stacking to be done in an orderly fashion • Stacking areas to be kept clean always	• Appointment of storage and stacking supervisor • Daily filing registers • Employees to be educated on how to keep good housekeeping on site
Storage of flammable materials	• Fire • Explosion	• Serious injuries • Death	***4***	***2***	***8***	***0***	***14***	• Stacking and storage of flammable materials to be supervised by storage and stacking supervisor • Store these materials in a correct order • Fire extinguishers to be placed in strategic position in case of fire	• Appointment of storage and stacking supervisor to monitor this activity • Daily filling of registers or checklists
Hazardous chemicals	• Contamination of environment • Exposure to employees • Skin irritation • Fire or explosion	• Minor damage to environment • Breathing problems • Minor injuries • Serious injuries • Death	***4***	***4***	***8***	***4***	***20***	• Proper storage and stacking of these chemicals • Use of required PPE by employees • Provision of fire equipment and correct use	• Appointment of stacking and storage supervisor to monitor this activity • Daily inspection on chemicals on site and PPE • Employees on site to be inducted

RISK ASSESSMENT									**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Inadequate equipment and incorrect or unserviceable fire extinguishers placed.	Delays in extinguishing fire.	Fire getting out of control Injuries to employees, possible fatal Damage to property	10	2	10	2	**24**	Serviceable and correct fire equipment to be provided and placed at suitable locations. Fire risk survey to be undertaken.	Visual and physical inspections	
Fire equipment obstructed	Trips and falls, delays in extinguishing fire.	Loss of life and extensive damage to property	10	4	8	2	**24**	Monthly checklist to include clear access to all fire extinguishing equipment.	Visual and physical inspections to be done by fire warden	
Fire fighting team on site not trained in operation of fire fighting equipment and not familiar with fire equipment locations	Delays in searching for fire extinguishers. Ineffective action taken to extinguish fire.	Injury to employees Damage to property	8	4	8	2	**22**	Provide training and have fire drills periodically. Ensure all employees know how to use the correct type of fire extinguishers effectively.	Supervisor / Safety officer to ensure training and drills are carried out.	
Water based fire extinguisher used on electrical equipment or burning liquids	Electrocution Increased spread of fire Explosions	Injury to employees. Possible fatalities. Damage to property	10	2	10	2	**24**	Fire training of all employees clearly defining the different types of fire and extinguishers	Supervisor / Safety officer to ensure training and drills are carried out.	
Fire alarms not tested to make sure it is working and can be heard everywhere	People not hearing the sound of the alarm and possible entrapment	Injury to personnel Possible fatality Damage to property	10	2	8	2	**22**	Monthly checklist to ensure alarm function and effectiveness and training of employees regarding action to take upon hearing the alarm.	Fire warden to control.	
Combustible materials not removed from building interiors at the end of the shift	Fire can occur after the shift	Injury to people in the building. Damage to property	4	4	10	2	**20**	Induct workers on usage and storage of combustible materials	Supervisor to check that this is done	
Storage of any material against the exterior of buildings is prohibited as it interferes with access	Access blocked and people trapped inside; Fire fighting team not able to gain access	Injury to people. Possible fatalities Damage to property	10	4	10	2	**26**	Store material 5m away from the exterior of buildings	Supervisor to control on a daily basis	

RISK ASSESSMENT								**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION** **A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**
Cigarette ends not extinguished and thrown into rubbish bins	Fire can occur in the bins	Injuries, and burns. Damage to property	4	4	8	2	**18**	Ash trays and waste bins to be emptied after every shift, induct all employees as to dedicate smoking areas.	Site agent / manager to control
Persons misusing or wilfully damaging fire equipment	Shortage of fire fighting equipment in the case of fire	Injury to people Possible fatalities. Damage to property	10	2	8	2	**22**	Supervisor to monitor equipment. Checklists to be done effectively on a regular basis	Fire warden and Supervision to control
Insufficient or locked exits not provided for every person to get out safely and easily	Overcrowding at exit points during fire. Trips falls	Bruises, cuts, broken limbs even fatalities	10	2	8	2	**22**	Fire escape routes to be determined and clearly marked	Fire Warden and Supervisor to check the access areas regular and ensure they are accessible.
Access to site and public people	• Slips tripping, exposure nails lying around on site	• Serious injuries • Minor injuries	***2***	***4***	***2***	***0***	***8***	• Safety signs to be placed at key areas such as at the gate • Unauthorized signs be placed where certain persons are not allowed • No material will be stacked at gate or close to access to routes on site	• Safety rep to supervise access to site and public people visiting site • Safety rep to ensure that access routes to site are clear and free from hazards • Safety rep to ensure that areas are clearly indicated so for the public persons to be protected and free from harm • Persons visiting site will not be allowed on site without wearing PPE • Public persons will not be allowed on site unless prior arrangement
Preparing area to work in, to which Public has access	Public exposed to hazards Public movement	• Injury to employees • Injury to member of the Public	8	4	4	2	18	• Inform Client that you will be working in area with public access • Demarcate area clearly to limit Public Access	• Work done under Supervisors • Risk Assessment Training • Public Liability Insurance

RISK ASSESSMENT									**RA NUMBER**	**RA000BV01**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION** **A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Working in area with public access	Public exposed to hazards Public movement	• Injury to employees • Injury to member of the Public	8	4	4	2	18	• Plan work to attempt to limit Public access (lunch time etc.) • Demarcate area clearly to limit Public Access • Ensure employees wear reflective vests so they are clearly visible • Supervisor to control public access • Maintain a high level of housekeeping to prevent trip hazards	• Work done under Supervisors • Risk Assessment Training • PPE Register • Stacking and Storage Supervisor Appointed • Stacking and Storage Register Maintained	
Finishing working in area with Public access	Public exposed to hazards Public movement	• Injury to employees • Injury to member of the Public	4	8	4	2	18	• Ensure area is cleaned, and free of debris • Only remove demarcations once area is clean • Ensure all access points (manholes, trap doors, trunking etc.) is securely closed	• Work done under Supervision	
Project Steering Team	• Slips, tripping, exposure to dangers on site	• Serious injuries • Minor injuries	***4***	***4***	***2***	***0***	***18***	• PPE to be used when conducting inspections on site	• Safety Rep has to ensure that this PST is briefed on dangers of the associated tasks being performed • Ensure that PST is deemed fit to be on site • Ensure that it does not allow anyone from the PST if site safety demands are not met	
Personal Protective Clothing	• Exposure to nails • Falling of material • Falling of employees working • Exposure to dust • Exposure to noise • Working with hand tools • Working with machinery • Exposure to chemicals	• Serious injuries • Infections • Death	***4***	***4***	***8***	***0***	***16***	• Keep site clean and free from hazards • Proper storage and stacking • All employees be provided with necessary PPE • Regular use of PPE by all employees on site	• Appointment and training of health and safety rep • Ensure that employees use proper PPE for a given task • Daily conduct PPE inspection registers or checklists • PPE receiving register be signed by all employees provided with a certain PPE as proof	

STACKING AND STORAGE OF MATERIALS									**RA NUMBER**	**RA000BV3**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION** **A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Stacking and Storage	Unstable stacks collapsing	• Injury to employee • Damage to material	4	4	4	0	**12**	• Staking conducted under the supervision of appointed Stacking and Storage supervisor • Stacking area clearly demarcated • Stacking is done on level base that can sustain the weight. • Articles stacked are of same size and weight • Any structure used to stack on (i.e. Shelves) can support weight • Stacks no higher than 3 times smaller dimension of base stack • Stacking broken down from top, down- under supervision. • Stacking area is kept neat and clean • Stacking Area suitably lit • Stacks can be easily reached and do not block access to fire escapes or fire equipment. • Stacks that are in danger of collapsing are dismantled immediately. • Employees are not to climb on stacking	• Construction Supervisor to do visual inspections • Stacking and Storage Supervisor appointed • Stacking and Storage Register maintained	

USE OF HAND TOOLS RISK ASSESSMENT									**RA NUMBER**	**RA0004**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Use of Hand Tools.	Use of defective tools	• Possible injury to user or other workers in the vicinity	4	10	2	0	**16**	• Hand Tool Inspector appointed • Hand tools to be checked and findings recorded on Hand Tool Register monthly • All employees to visually inspect tool prior to use. • All defective tools to be removed from site immediately • Correct PPE worn, eye protection, hand protection and foot protection.	• Hand Tool Inspector Appointment • Hand Tool Monthly Register • Proof of all employees training in Risk associated with use of hand tools. • PPE register completed indicating staff issued (free of Charge) appropriate PPE • All work conducted under supervision.	
	Improper use of Hand Tool	• Possible injury to user or other workers in the vicinity • Damage to Hand Tools	4	8	2	0	**14**	• Trained competent persons to use tools • Right tool to be used for the job. *(a Screw driver is not a chisel and a pair of pliers is not a hammer)*	• Proof of all employees training in Risk associated with use of hand tools. • All work conducted under supervision.	
	Tools lying around	• Potential trip hazard could injure user or other workers in the vicinity. • Damage to Hand Tools • Theft	4	8	2	0	**14**	• Tools to be neatly stored in proper toolbox. • Work area to be demarcated with appropriate men at work sign.	• Proof of all employees training in Risk associated with use of hand tools. • All work conducted under supervision.	

USE OF PORTABLE ELECTRICAL TOOLS RISK ASSESSMENT									**RA NUMBER**	**RA0006**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
Buying of portable tools for the job.	Unsafe tools	• Injury to employees • Damage to property	4	8	4	0	**16**	• Set standards of tools to be bought by buying department. • Must conform to SABS codes and standards.	Feedback from site regarding standard of tools	
Use Portable Electric Tools	Use of defective tools or removal of Safety Guards	• Possible injury to user or other workers in the vicinity	4	10	4	0	**18**	• Portable Electric Tool Inspector appointed • Portable Electric tools to be checked and findings recorded on Portable Electric Tool Register Weekly • All employees to visually inspect tool prior to use. • All defective tools to be removed from site immediately • Correct PPE worn, eye protection, hand protection and foot protection.	• Portable Electric Tool Inspector Appointment • Portable Electric Tool Monthly Register • Proof of all employees training in Risk associated with use of Portable Electric Tools. • PPE register completed indicating staff issued (free of Charge) appropriate PPE • All work conducted under supervision.	
	Improper use of Portable Electric Tools	• Possible injury to user or other workers in the vicinity • Damage to Portable Electric Tools	4	8	4	0	**16**	• Trained competent persons to use tools • Right tool to be used for the job. *(Especially bits and blades used, masonry bits/blades not used on steel ect.)*	• Proof of all employees training in Risk associated with use of hand tools. • All work conducted under supervision.	
	Tools lying around	• Potential trip hazard could injure user or other workers in the vicinity. • Damage to Portable Electric Tools • Theft	4	10	4	0	**18**	• Tools to be neatly stored in proper toolbox. • Work area to be demarcated with appropriate men at work sign. • Power cords and or extension cords where possible placed next to walls	• Proof of all employees training in Risk associated with use of Portable Electric tools. • All work conducted under supervision.	
	Operating tools with others working in the same area.	• Possible injury to user or other workers in the vicinity	4	10	4	0	**18**	• Work area to be demarcated with appropriate men at work sign.	• Proof of all employees training in Risk associated with use of Portable Electric tools.. • All work conducted under supervision	

USE OF PORTABLE GRINDERS RISK ASSESSMENT									**RA NUMBER**	**RA0007**
ACTIVITY	**POTENTIAL HAZARD**	**POSSIBLE RESULT**	**RISK EVALUATION A**	**B**	**C**	**D**	**R**	**PREVENTATIVE MEASURES**	**CONTROLS**	
1 Check work area	Slip or fall or obstruction Fire risk from sparks igniting flammable material or gas	Injury to employees	4	4	2	0	**10**	***Obtain Hot Works Permit from client*** Clean working area Ensure area free of flammable substances Fire extinguisher must be at hand in case of fire Train employees in correct and safe use of Fire Extinguisher.	Visual inspection by supervision. Fire Extinguisher Inspector Appointment Fire Extinguisher register	
2 Pre use inspection.	Electric shock, loose blade and no guards	Injury to employees and possible fatality.	8	4	2	0	**14**	Trained and competent person to inspect before use.	Supervision must ensure that checklists are completed and signed.	
3 Choose correct disc for task	Wrong disc could result in disc fracture – high speed flying objects	Injury to employees Damage to equipment	10	4	2	0	**16**	Masonry discs for masonry/concrete materials; Steel discs for steel	Visual inspection Check and insure proper disc	
4 Checking of the material to be cut	Blade jamming suddenly or falling material	Injury to employee Damage to equipment	4	4	2	0	**10**	Vice or counter weight to material; Remove nails and screws	Physical check of item to be cut	
5 Using electrical cables	Cables lying in water, vehicles driving over cables, tripping hazard.	Injury to employees, damage to equipment.	8	4	2	0	**14**	Instruct workers on safe working procedure.	Supervisor to control.	
6 Plug in machine and switch on. Test and cut	Rotating blade Extension cable not paced correctly.	Injury to employee Electrocution. Property damage.	10	4	2	0	**16**	Use personal protective equipment, safety goggles, safety shoes, leather apron, elbow length gloves, ear plugs and appropriate dust mask. The cable is to be placed that it is behind the operator while grinder in use.	Train a competent person to operate grinder. Toolbox talks.	
7 Complete task and switch off machine	Unstable work item or continuing blade rotation	Use of personal protective equipment; place tool away only after blade has been rotating	8	4	2	0	**14**	Keep work areas tidy. Operator to ensure grinder has stopped and is unplugged after use. Use of personal protective equipment, safety goggles, safety shoes, leather apron, elbow length gloves, ear plugs and appropriate dust mask	Supervisor to ensure compliance. Toolbox talks and PTO's to be done on the task.	

SITE SPECIFIC BASELINE RISK ASSESSMENT (P23/3 - Bid No. 11/2022/23											
SITE SPECIFIC RISKS				**QUALITATIVE RISK ASSESSMENT**			**RISK STRATEGIES**		**RESIDUAL RISK**		
RISK CLUSTER	RISK No.	ACTIVITY	HAZARD / RISK	L	S	R	MITIGATION ACTIONS	TIME LINE	L	S	R
Traffic accommodation	1	Public vehicular and pedestrian traffic travelling on P2-9 during the construction of the Works	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures.	Implement prior to start of con-struction activities then review continually.	2	3	6
Traffic accommodation	2	Construction vehicular and pedestrian traffic travelling on P2-9 during the construction of the Works	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Implement appropriate road safety rules for drivers, plant operators and all other construction personnel.	Implement prior to start of con-struction activities then review continually.	2	3	6
Traffic accommodation	3	Construction traffic entering or leaving half-width construction zones	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Implement appropriate road safety rules for drivers and plant operators.	Implement prior to start of con-struction activities then review continually.	2	3	6
Traffic accommodation	4	Construction traffic entering or leaving the Works at public or private access roads	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Implement appropriate road safety rules for drivers and plant operators.	Implement prior to start of con-struction activities then review continually.	2	3	6
Traffic accommodation	5	Construction activities taking place adjacent to the trafficked road	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Confine the construction activities of construction vehicles, plant and personnel to the delineated work areas outside of the trafficked road.	Implement prior to start of con-struction activities then review continually.	2	3	6
Traffic accommodation	6	Half-width construction zones operating under STOP/GO traffic control between sunrise and sunset	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Train all traffic control personnel and flagmen.	Implement prior to start of con-struction activities then review continually.	2	3	6

Traffic accommodation	7	Half-width construction road closure zones operating under traffic signal traffic control between sunset and sunrise	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Provide floodlighting on the approaches to the road closure zones. Train all traffic control personnel and flagmen.	Implement prior to start of con-struction activities then review continually.	2	3	6
Traffic accommodation	8	Construction activities taking place in terrain with potentially restricted sight distance and limited overtaking opportunities	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Ensure that adequate advance warning is provided at the approaches to all half-width construction road closures and to all other areas where construction activities are taking place requiring advance warning.	Implement prior to start of con-struction activities then review continually.	2	3	6
Traffic accommodation	9	Regular presence of livestock along P2-9 within the road reserve, including along the carriageway and shoulders	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Traffic accommodation plan shall specifically include appropriate measures to be implemented in order to remove any cattle found within the road reserve.	Implement prior to start of con-struction activities then review continually.	2	3	6

SITE SPECIFIC BASELINE RISK ASSESSMENT (P23/3 - Bid No. 11/2022/23											
SITE SPECIFIC RISKS				**QUALITATIVE RISK ASSESSMENT**			**RISK STRATEGIES**		**RESIDUAL RISK**		
RISK CLUSTER	RISK No.	ACTIVITY	HAZARD / RISK	L	S	R	MITIGATION ACTIONS	TIME LINE	L	S	R
Roadworks	1	Construction of patching, layerworks, surfacing and road marking taking place along the surfaced carriageway of P2-9 directly adjacent to the trafficked road	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Confine the construction activities of construction vehicles, plant and personnel to the delineated work areas outside of the trafficked road.	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	2	Construction activities such as clearing and grubbing, road sign erection, and grassing taking place along the shoulders of P2-9 directly adjacent to the trafficked road	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Confine the construction activities of construction vehicles, plant and personnel to the delineated work areas outside of the trafficked road.	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	3	Operation on site of heavy civil engineering plant and vehicles	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Maintain plant and vehicles in good working order. Use only trained, competent, medically fit drivers and operators. Provide adequate clear working space and protective apparel.	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	4	Operation on site of small self-propelled, hand-operated compaction equipment and concrete saws, power saws, drills, brush cutters, pumps and other power tools, hand sprayers for bitumen, welding equipment, and nuclear gauges for laboratory compaction measurement	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Maintain such small plant, power tools, hand sprayers, welding equipment and nuclear gauges in good working order. Use only trained, competent, medically fit operators and welders. Provide adequate clear working space and protective apparel. Adhere to all regulations governing the use of nuclear gauges.	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	5	Operation on site of pneumatic drilling and breaking tools, compressed air	Construction activities/ conditions leading to an accident.	3	4	12	Maintain such tools and equipment in good working order.	Implement prior to start of con-struction activities then	2	3	6

		cleaning equipment, and water jetting equipment (if required)	Risk of personal injury/ permanent disability/ death.				Use only trained, competent, medically fit operators. Provide adequate clear working space and protective apparel.	review continually.			
Roadworks	6	Use of unpowered hand tools, including picks, mallets, hoes, axes, machetes, slashers, chisels, hammers, saws and shears	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	3	9	Maintain such equipment in good working order. Use only trained, competent, medically fit personnel. Provide adequate clear working space and protective apparel.	Implement prior to start of con-struction activities then review continually.	2	2	4
Roadworks	7	Working with hot applied patching and surfacing materials	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	3	9	Maintain all related plant and equipment in good working order. Use only trained, competent, medically fit personnel. Provide adequate clear working space and protective apparel.	Implement prior to start of con-struction activities then review continually.	2	2	4
Roadworks	8	Working with flammable materials/ hazardous materials such as fuels, oils, LP gas and bitumen products, adhesives, road marking paints, bitumen paints, cleaning products, herbicides and ant poison (if required)	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Maintain all related equipment and storage facilities in good working order. Use only trained, competent, medically fit personnel. Provide adequate clear working space and protective apparel.	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	9	Handling of materials generally, including aggregates, gabion hand stone, concrete pipes, bitumen emulsions, cement, creosoted poles, and steel products such as gabion baskets, road signs and guardrails	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	3	9	Supervise all loading and offloading operations and provide appropriate protective apparel for persons handling materials.	Implement prior to start of con-struction activities then review continually.	2	2	4
Roadworks	10	Bulk mixing plant	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Maintain all related plant and equipment in good working order. Use only trained, competent, medically fit personnel. Provide adequate clear working space and protective apparel.	Implement prior to start of con-struction activities then review continually.	2	3	6

							Adhere to all regulations governing the use of bulk mixing plant.				
Roadworks	11	Relocation of services	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Induct all personnel with respect to the location of and safety issues pertaining to the various affected services. All affected services to be identified, located and clearly marked in conjunction with the service owners. All assistance with services relocation work to be limited to agreed elements of the civils work only, and to be rendered only under the close supervision of the service owners. Service owners to remain responsible at all times for all occupations of live electrical, telecommunications and bulk water supply services, and for all technical aspects related to the relocation work required.	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	12	Working below overhead powerlines	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Provide strict supervision for all activities taking place near or under the powerlines, particularly work involving excavators, mobile crushing plant, tipper truck loading and discharging operations, cranes, and pressure spraying activities such as binder spraying, hydroseeding, and water jetting (if required).	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	13	Fall protection during activities such as traffic control floodlight erection, maintenance, and dismantling, road sign erection and dismantling.	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Implement fall protection plan. Use only trained, competent, medically fit personnel. Provide adequate protective apparel. Provide adequate fall prevention or fall arrest equipment.	Implement prior to start of con-struction activities then review continually.	2	3	6
Roadworks	14	Laboratory sampling and testing	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	3	9	Plan then implement appropriate traffic accommodation measures. Use only trained, competent, medically fit personnel for	Implement prior to start of con-struction activities then	2	2	4

							sample collection and field testing, and for carrying out the testing work using the laboratory compression machines, ovens, burners, etc.	review continually.			
Roadworks	15	Working in rolling terrain	Construction activities/ conditions leading to an accident. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate traffic accommodation measures. Maintain plant and vehicles in good working order. Use only trained, competent, medically fit drivers and operators. Regularly emphasise aspects of driver and operator training related to the required daily checks on vehicle roadworthiness, the transportation of heavy loads on steep slopes, and good driving practice in conditions with generally restricted sight distance and overtaking opportunities, and in misty conditions.	Implement prior to start of con-struction activities then review continually.	2	3	6

SITE SPECIFIC BASELINE RISK ASSESSMENT (P23/3 - Bid No. 11/2022/23											
SITE SPECIFIC RISKS				**QUALITATIVE RISK ASSESSMENT**			**RISK STRATEGIES**		**RESIDUAL RISK**		
RISK CLUSTER	RISK No.	ACTIVITY	HAZARD / RISK	L	S	R	MITIGATION ACTIONS	TIME LINE	L	S	R
General	1	General activities on site	Hazards related to local fauna and flora and insects (snakes, monkeys, dogs, feral cats, rodents, thorns, nettles, bees, wasps, spiders, ticks, mosquitoes, etcetera). Risk of personal injury/ permanent disability/ death.	3	3	9	Induct employees with regard to such potential dangers, particularly prior to activities such as bush clearing and handling of stockpiled materials. Induct employees with regard to the danger of related common diseases (e.g., rabies, tick bite fever, etcetera). Keep contact details for emergency services prominently displayed in the site office.	Implement prior to start of con-struction activities then review continually.	2	2	4
General	2	General activities on site	Hazards related to fire, including veld and bush fires in the areas surrounding P2-9. Risk of personal injury/ permanent disability/ death.	3	4	12	Induct employees with regard to potential fire dangers and the procedures to be followed in the event of a fire. Keep contact details for emergency services prominently displayed in the site office.	Implement prior to start of con-struction activities then review continually.	2	3	6
General	3	General activities on site	Hazards related to exposure to natural phenomena such as heat, cold, rain, wind, hail and lightning. Risk of personal injury/ permanent disability/ death.	3	3	9	Induct employees with regard to the potential health risks such as headaches, nausea, dehydration, heat exhaustion, fainting, hypothermia, concussion, electrical shock and burns, and associated increased fall risk. Keep contact details for emergency services prominently displayed in the site office.	Implement prior to start of con-struction activities then review continually.	2	2	4
General	4	General activities on site	Hazards related to employees not wearing the required protective apparel. Risk of personal injury/ permanent disability/ death.	3	3	9	Ensure that employees have been issued with the appropriate protective apparel required, and replace such apparel if damaged. Train supervisors to ensure that the required protective	Implement prior to start of con-struction activities then review continually.	2	2	4

							apparel is indeed being worn by employees when the task is executed. Induct employees with regard to the potential dangers associated with not wearing the required protective apparel. Institute disciplinary action against employees who fail to wear the protective apparel issued.				
General	5	General sanitation and hygiene on site, and disease prevention	Hazards resulting from diseases related to poor sanitation and hygiene, and other diseases. Risk of personal injury/ permanent disability/ death.	3	4	12	Induct employees with regard to sanitation and hygiene issues, and related diseases. Induct employees with regard to the necessity to seek immediate medical treatment with respect to any injuries sustained on site, however minor. Provide adequate serviced facilities on site such as washing and ablution facilities and clean potable water. Hold HIV/AIDS awareness workshops. Keep contact details for emergency services prominently displayed in the site office.	Implement prior to start of con-struction activities then review continually.	2	3	6
General	6	General security on site	Hazards related to security on site (burglary, robbery, armed robbery, assault, etcetera). Risk of personal injury/ permanent disability/ death.	3	4	12	Provide adequate security on site. Keep contact details for emergency services prominently displayed in the site office.	Implement prior to start of con-struction activities then review continually.	2	3	6
General	7	Emergency evacuation of injured personnel in the case of life threatening injuries	Hazards related to delays in providing appropriate medical attention. Risk of personal injury/ permanent disability/ death.	3	4	12	Plan then implement appropriate emergency evacuation procedures to be followed in such instances when there may not be time to await the arrival of the emergency services. Induct employees with regard to the procedures to be followed in such instances. Keep contact details for emergency services	Implement prior to start of con-struction activities then review continually.	2	3	6

							prominently displayed in the site office. Contact the staff at the relevant institution to forewarn them of the status quo of the casualty en route, so that they can prepare for their arrival and possibly even have paramedics intercept the casualty en route.				

E1. DEFINITIONS

For the purpose of this contract the following shall apply:

(a) **Employer**" where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract 2015 and it shall have the exact same meaning as "**client**" as defined in the Construction Regulations 2014. "**Employer**" and "**client**" are therefore interchangeable and shall be read in the context of the relevant document.

(b) "**Contractor**" wherever used in the contract documents and in this specification, shall have the same meaning as "**Contractor**" as defined in the General Conditions of Contract 2015.

In this specification the terms "**principal contractor**" and "**contractor**" are replaced with "**Contractor**" and "**subcontractor**" respectively.

For the purpose of this contract the **Contractor** will, in terms of OHSA 1993, be the mandatary, without derogating from his status as an employer in his own right.

(c) "**Employer's Agent**" where used in this specification, means the Employer's Agent as defined in the General Conditions of Contract 2015. In terms of the Construction Regulations the Employer's Agent may act as agent on behalf of the Employer (the client as defined in the Construction Regulations).

E2. TENDERS

This Health and Safety Specification forms an integral part of the Contract and Tenderers are required to use it during the tender phase for pricing the preparation of a project specific Health and Safety Plan prior to commencing any work and for pricing the costs of ensuring compliance thereto during construction. Tenderers must forward a copy of this Specification to all other persons or organisations that may be submitting prices to the Tenderer during the tender stage to enable them to include the cost of preparing their own Health and Safety Plan, relevant to their particular operation, and for compliance with the health and safety requirements during construction. Payment items are included in the Schedule of Quantities for compliance with the Occupational Health and Safety Act and Construction Regulations and with this Specification.

Tenderers are required to complete Form J 'Contractor's Health and Safety Declaration' in section T2.2 'Returnable Schedules'.

Failure to submit the foregoing with his tender and/or to provide realistic rates for relevant payment items will lead to the conclusion that the Contractor will not be able to carry out the work

under the contract safely, in accordance with the Act and Construction Regulations and his tender shall be deemed non-responsive.

E3. NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK (ANNEXURE 2)

Where the contract meets the requirements of Construction Regulation 2014, the Contractor shall, before commencement of the work and in accordance with the requirements of Regulation 2014, notify the Provincial Director of the Department of Labour of the intention to carry out the construction work, using the pro forma form included as Annexure 2 to this Health and Safety Specification.

NOTICE REGARDING THE APPLICATION OF CONSTRUCTION PERMIT (ANNEXURE 1)

The construction permit must be applied for within 30 days of the appointment and no work should be carried out before approval of the construction permit in terms of CR 2014. The project that that exceeds 365 days, involve more than 3600 person days of the construction works must apply for the permit. Therefore, the construction permit is applicable and must be attained before the project commence on this project.

A copy of the signed notification form must be kept on site or approval of construction permit and must be available for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representative trade unions and any other persons on the site. A copy of the notification or construction permit approval form shall also be kept on the health and safety file, and a further copy shall be forwarded to the Employer for his records.
Note: In this contract, the Construction Permit is applicable and must be obtained in terms of CR 2014.

E4. HEALTH AND SAFETY PLAN

Before commencement of any construction work, the Contractor shall prepare a project specific Health and Safety Plan complying with the requirements of Construction Regulation 7(1)(a) and this Health and Safety Specification.

The Health and Safety Plan must include a risk assessment performed and recorded in writing by a competent person as required in terms of Construction Regulation 9. The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards identified.

The Health and Safety Plan shall be available on site for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representative trade unions, and health and

safety representatives and committee members, and must be monitored and reviewed periodically by the Contractor.

E5. APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

E6.1 Appointments

The Contractor shall appoint in writing all employees.

The Contractor shall appoint in writing all subcontractors, and such appointments shall be in compliance with the requirements of Construction Regulation 7.

E6.2 Health and safety induction training

No person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site.

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo health and safety induction training by a competent person before commencement of construction work in compliance with Construction Regulations 7(5) and 9(3) and (4).

The Contractor shall ensure that all visitors to the construction site undergo health and safety induction and are provided with the necessary personal protective equipment in compliance with Construction Regulation 7(6).

E6.3 Medical certificate of fitness

The Contractor shall ensure that every employee, including subcontractors and their employees, has a valid medical certificate of fitness issued in compliance with Construction Regulation 7(1)(g) or 7(8) as applicable.

E6. APPOINTMENT OF SAFETY PERSONNEL

E7.1 Construction manager

Refer to Construction Regulation 8(1), (2), (3) and (4).

The Contractor shall appoint a full-time **Construction Manager** with the duty of managing all the construction work on the site, including the duty of ensuring occupational health and safety compliance.

The Contractor may also have to appoint one or more **assistant construction managers** to assist the Construction Manager where justified by the scope and complexity of the works.

E7.2 Construction health and safety officer

Refer to Construction Regulation 8(5) and (6).

Taking into consideration the size of the project and the dangers, hazards or risks that can be expected, the Contractor shall appoint in writing a full-time or part-time **construction health and safety officer** to assist in the control of all health and safety related aspects on the site. The construction health and safety officer shall be registered as required by the Chief Inspector of the Department of Labour and shall have the necessary competence and resources to perform his/her duties diligently.

E7.3 Construction supervisor

Refer to Construction Regulation 8(7), (8), (9) and (10).

The Contractor shall appoint a **construction superintendent** responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

The Contractor may also have to appoint one or more competent employees to assist the construction superintendent where justified by the scope and complexity of the works.

E7.4 Health and safety representatives

In terms of **Sections 17 and 18 of the Act (OHSA 1993)** the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a **health and safety representative** whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 50 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to

inspect the workplace, plant, machinery, etc. on a regular basis, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

E7.5 Health and safety committee

In terms of Section **19 of the Act (OHSA 1993)**, the Contractor (as employer) shall establish one or more **health and safety committee(s)** where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

E7.6 Competent persons

The Contractor shall appoint in writing designated competent employees and/or other competent persons as required by the Act and Regulations. Such appointments shall be in accordance with the relevant applicable sections of the Act and Regulations as determined by the requirements of the contract.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work in all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities for compliance with **all** requirements of the Construction Regulations.

E7. RECORDS AND REGISTERS

The Contractor is bound to keep records and registers related to health and safety on site as required by the relevant applicable sections of the Act and Regulations as determined by the requirements of the contract. Such records and registers shall be available for periodic inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees and representatives of trade unions.

E8. CONTRACTOR'S RESPONSIBILITIES

For this contract the Contractor will be the mandatory of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2014.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) in terms of C1.4 'Agreement in terms of **Section 37(2)** of the Occupational Health and Safety Act No. 85 of 1993', to confirm his status as mandatory (employer) for the contract under consideration.

***The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations*.**

E10. MEASUREMENT AND PAYMENT

It is a condition of this contract that contractors who submit tenders for this contract shall make provision in their various tendered rates and prices for all costs related to the health and safety measures required in terms of the Act and Regulations during the construction process.

(a) Safety appointments

No separate additional payment will be made to cover the costs related to persons appointed as required in terms of the Act and Regulations to fulfil the various health and safety functions. Such persons include the Construction Manager, any assistant construction managers, the construction health and safety officer, the construction superintendent, any assistant construction superintendents, health and safety representatives, health and safety committee members and competent persons, all as referred to in subclauses E7.1 to E7.6 above. The Contractor shall therefore make provision in the various tendered rates and prices for all costs related to such persons.

(b) Records and registers

The keeping of records and registers related to health and safety on site as described in clause E8 above shall be regarded as a normal duty of the Contractor for which payment shall be deemed to be included in the Contractor's various tendered rates and prices, and for which

no separate additional payment will be made except to the extent provided in item B13.02 of the Schedule of Quantities.

(c) Medical certificates

No separate additional payment will be made to cover the costs related to obtaining the medical certificates of fitness required for every employee, including subcontractors and their employees, issued in compliance with Construction Regulation 7(1)(g) or 7(8) as applicable. The Contractor shall therefore make provision in the various tendered rates and prices for all costs related to such medical certificates.

ANNEXURE 1 (to OHSA 1993 Health and Safety Specification)

To: The Provincial Director, Department of Labour, ...

ANNEXURE 1

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(Regulation 4 of the Construction Regulations, 2014)

APPLICATION OF CONSTRUCTION PERMIT

The example of forms to be obtained on the Construction Regulation 2014 *page 78 and 79*

OHS LEGAL APPOINTMENTS

REFERANCE IN RELATION TO CONSTRUCTION REGULATION 2014	
Appointment	**Regulation**
Construction Supervisor & Assistant Supervisor	(Construction Regulation 6(1) & 6(2)
Construction Vehicles and Mobile Plant/Machinery Supervisor	(Construction Regulation 21)
Demolition Supervisor	(Construction Regulation 12)
Drivers and Operators of Construction Vehicles or Plant	(Construction Regulation 21)
Electrical Installation and Appliances Inspector	(Construction Regulation 22)
Emergency/Security/Fire Coordinator	(Construction Regulation 27)
Excavation Supervisor	(Construction Regulation 11)
Explosive Powered Tool Supervisor	(Construction Regulation 19)
Fall Protection Supervisor	(Construction Regulation 8)
First Aider	(General Safety Regulation 3)
Fire Equipment Inspector	(Construction Regulation 27)
Formwork & Support work Supervisor	(Construction Regulation 10)
Hazardous Chemical Substances Supervisor	(HCS Regulations)
Incident Investigator	(General Admin Regulation 29)
Ladder Inspector	(General Safety Regulation 13A)
Lifting Equipment Inspector	(Construction Regulation 20)
Materials Hoist Inspector	(Construction Regulation 17)
OH&S Committee	(OH&S Act Section 19)
OH&S Officer	(Construction Regulation 6(6)
OH&S Representatives	(OH&S Act Section 17)
Person Responsible for Machinery	(General Machinery Regulation 2)
Scaffolding Supervisor	(Construction Regulation 14)
Stacking & Storage Supervisor	(Construction Regulation 26)
Structures Supervisor	(Construction Regulation 9)
Suspended Platform Supervisor	(Construction Regulation 15)
Tunnelling Supervisor	(Construction Regulation 13)
Batch Plants	(Construction Regulation 18)
Working on/next to Water Supervisor	(Construction Regulation 24)
Welding Supervisor	(General Safety Regulation 9)

In addition the Employer requires that a Traffic Safety Officer be appointed. The above appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information shall be communicated and agreed with the appointees. Notice of appointments shall be submitted to the Employer. All changes shall also be communicated to the Employer.

The contractor shall, furthermore, provide the Employer with an organogram of all subcontractors that he/she has appointed or intends to appoint and keep this list updated and prominently displayed on site.

(iii) Designation of OH&S Representatives (Section 17 of the OH&S Act)

Where the contractor employs more than 20 persons (including the employees of subcontractors) he has to appoint one OH&S representative for every 50 employees or part thereof. This is a minimum (legal) requirement. The contractor may at his own discretion appoint more OH&S Representatives according to site specific requirements. General Administrative Regulation 6 requires that the appointment or election and subsequent designation of the OH&S representatives be conducted in consultation with employee

representatives or employees. (Section 17 of the Act and General Administrative Regulation 6 & 7). OH&S representatives shall be designated in writing and the designation shall include the area of responsibility of the person and term of the designation. OH&S representatives must be experienced, permanently employed by the contractor or his subcontractors, trained and able to move freely within their designated area of responsibility.

SECTION E: EPWP CONDITIONS OF CONTRACT

Note:

Payment for the labor-intensive component of the works

Payment for works identified in the Scope of Work as being labor-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

Applicable labour laws

The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.

1 Introduction

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

1.2 In this document –

(a) "department" means any department of the State, implementing agent or contractor;
(b) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP;
(c) "worker" means any person working in an elementary occupation on a SPWP;
(d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;
(e) "management" means any person employed by a department or implementing agency to administer or execute an SPWP;
(f) "task" means a fixed quantity of work;
(g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
(h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
(i) "time-rated worker" means a worker paid on the basis of the length of time worked.

2 Terms of Work

2.1 Workers on a SPWP are employed on a temporary basis.

2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.

2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

3 Normal Hours of Work

3.1 An employer may not set tasks or hours of work that require a worker to work–

(a) more than forty hours in any week
(b) on more than five days in any week; and
(c) for more than eight hours on any day.

4 Meal Breaks

4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

4.2 An employer and worker may agree on longer meal breaks (employment contract must reflect that)

4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5 Special Conditions for Security Guards

5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6 Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7 Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

8 Work on Sundays and Public Holidays

8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.

12 Statement of Conditions

12.1 An employer must give a worker a statement containing the following details at the start of employment –
(a) the employer's name and address and the name of the SPWP;
(b) the tasks or job that the worker is to perform; and
(c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
(d) the worker's rate of pay and how this is to be calculated;
(e) the training that the worker will receive during the SPWP.

12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

12.3 An employer must supply each worker with a copy of these conditions of employment.

13 Keeping Records

13.1 Every employer must keep a written record of at least the following –
- (a) the worker's name and position;
- (b) in the case of a task-rated worker, the number of tasks completed by the worker;
- (c) in the case of a time-rated worker, the time worked by the worker;
- (d) payments made to each worker.

13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.

14 Payment

14.1 An employer must pay all wages at least monthly or forth nightly into a bank account.

14.2 A task-rated worker will only be paid for tasks that have been completed.

14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

14.4 A time-rated worker will be paid at the end of each month.

14.5 An employer must give a worker the following information in writing –
- (a) the period for which payment is made;
- (b) the numbers of tasks completed or hours worked;
- (c) the worker's earnings;
- (d) any money deducted from the payment;
- (e) the actual amount paid to the worker.

14.6 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

14.7 Payment of labour as per government gazette.

15 Deductions

15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

15.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

15.4 An employer may not require or allow a worker to –
- (a) repay any payment except an overpayment previously made by the employer by mistake;
- (b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
- (c) pay the employer or any other person for having been employed.

16 Health and Safety

16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

17 Compensation for Injuries and Diseases

17.1 It is the responsibility of the contractor to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

17.2 A worker must report any work-related injury or occupational disease to their employer or manager.

17.3 The employer must report the accident or disease to the Compensation Commissioner.

17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

18 Termination

18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

18.2 A worker will not receive severance pay on termination.

18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

19 Certificate of Service

19.1 On termination of employment, a worker is entitled to a certificate stating –

(a) the worker's full name;
(b) the name and address of the employer;
(c) the SPWP on which the worker worked;
(d) the work performed by the worker;
(e) any training received by the worker as part of the SPWP;
(f) the period for which the worker worked on the SPWP;
(g) any other information agreed on by the employer and worker.

20 Job Creation

It is required that for every R1 million spent on this project, a minimum of 4 jobs be created within the local Municipal area for a minimum employment period of 6 months.

21 Training

It is required that a minimum of 2 students be employed every year for in-service training for a minimum period of 12 months until the project lapses with a stipend of R15,000.00 including the accommodation and travelling. The accredited training should be provided on site and must be performed by the local service provide sourced from local area within Municipality boundaries (only where the project is active).

22 Subcontracting

Items that must be subcontracted to departmentally approved SMME Subcontractors. This will include but not limited to, traffic accommodation, detours, drainage, road signs, fencing, finishing of borrow pits and all other non-specialized work and transporting of labours. **Failure of the principal contractor to adhere to the 30% approved subcontracting allocation will lead to termination of this contract.**

SECTION D1000 TRAINING, COACHING, GUIDANCE, MENTORING AND ASSISTANCE

PART C 4: STAKEHOLDER AND COMMUNITY LIAISON, AND TARGETED LABOUR ANDTARGETED ENTERPRISES UTILISATION AND DEVELOPMENT

TABLE OF CONTENTS

D1001 .....SCOPE

D1002 DEFINITIONS AND APPLICABLE LEGISLATION

D1003 TARGET GROUP PARTICIPATION

D1004 STAKEHOLDER AND COMMUNITY liaison AND SOCIAL FACILITATION

D1005 MOBILIZATION PERIOD

D1007 TENDER PROCESS FOR TARGETED ENTERPRISES

D1008 GENERAL RESPONSIBILITIES OF THE CONTRACTOR TOWARDS TARGETED ENTERPRISES

D1009 WORK SUITABLE FOR EXECUTION BY TARGETED ENTERPRISES

D1010 TRAINING, COACHING, GUIDANCE, MENTORING and assistance.

D1011 LABOUR ENHANCED CONSTRUCTION.

D1012 COMMUNITY DEVELOPMENT

D1013 MEASUREMENT AND PAYMENT

D1001 SCOPE

This section describes the structured engagement with project Stakeholders and affected Communities. It also guides the selection and the enhanced utilization and development of Targeted Labour and Targeted Enterprises.

The scope of the work described in this section shall be based on the Employer's 14 principles for project liaison, sub-contracting and labour sourcing in all Department of Police, Roads and Transport projects, which are stipulated below:

- Establish project steering committee (PSCs) in each project to create a platform for project liaison, works execution, sub-contracting and employment facilitation.
- Department of Police, Roads and Transport to allow the PSC members to nominate the chairperson and provide secretarial support. Representation to comprise: Department of Police Roads and Transport; contractor; consultant; business representatives; traditional representatives; provincial and municipal government representatives (not politicians); community representatives; CLO and any other critical local stakeholder that may be deemed necessary by the PSC.
- Community Liaison Officer (CLO) selection to be done under the auspices of the PSC.
- Definition of a target area (sometimes referred to as a local area or traffic area) to be done under the auspices of the PSC.
- Setup a database of local subcontractors and suppliers (and consultants where relevant) to be done under the auspices of local municipal structures within the respective district. The final database to be signed off by the local district municipality.
- Setup of database of local labour for the targeted area to be done under the auspicesof the PSC. The final list to be signed off by the PSC. An agreed system of labour selection from the database is to be agreed at the PSC.
- Handover of signed-off databases for sub-contracting and labour to contractor for open tender process and recruitment respectively done by the contractor in the presence of the Employer, Consultant (where applicable), Municipal officials during the briefing session.
- Tender to be conducted by contractor using government principles (e.g., public advertisement, received bids, evaluation of bids, awarding of bids and announcement of bidders and prices). Informing the winning bidders in the PSC.
- Appeals on the tender process to be escalated to Department of Police, Roads and Transport for an independent review.
- Capability assessments of contractors and suppliers to be done by the local or district municipality prior to tender stage, to identify any deficiencies in skills and experience.
- In the absence of available local database, the open briefing session will serve as sourcing or development of local data base for this particular project. For labour, skills assessments

are to be done at recruitment stage.

- Contractor development support and training to be coordinated and conducted, ahead, prior to project commencement.
- Identification of works areas that are deliverable by local service providers, and areas where capabilities are not available locally. All works areas where capabilities are not available locally shall be imported and locals will be given an opportunity to learn.
- Formal contracting arrangements to be ensured for all projects.
- Communication to be streamlined through the PSC and used to manage expectations of local business and communities.
- These principles are applied to facilitate better project level liaison with local communities and structures. They also serve to ensure communication and transparency in the execution of works and to ensure inclusivity in the allocation of projects to benefit black business and local communities as prescribed in the PPPFA for local subcontracting.

D1002 DEFINITIONS AND APPLICABLE LEGISLATION

a) Definitions

Unless inconsistent with the context, in these specifications, the following terms,words or expressions shall have the meanings hereby assigned to them:

- Business Coaching
- Business coaching establishes an atmosphere of mutual trust, respect, responsibility and accountability to motivate the business owner and his team.To that end, the business coach must conduct an ethical and competent practice, based on appropriate professional experience and business knowledge.
- Community[1]
- South African Citizens, as defined in terms of the South African Citizenship Act, 1995 (Act 88 of 1995), who permanently reside within the Target Area(s)of the project.
- Contract Participation
- A process by which the Employer implements Government's objectives by setting targets to enhance Targeted Labour and Targeted Enterprises' utilization and development, which the Contractor shall achieve as a minimum.
- Contract Participation Goal (CPG)
- The monetary value of the targets set by the Employer in the ContractParticipation process and stated in the Contract Data.
- Contract Participation Performance (CPP)
- The measure of the Contractor's progress in achieving the CPG.
- Designated Group[2], [3]

Unless otherwise permissible in terms of procurement regulations or the PPPFA, it is the groups used to define Targeted Labour and the ownership and/or control of Targeted Enterprises and shall be restricted to:

- black designated groups as defined in the codes of good practice issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act 53 of 2003);
- black people as defined in section 1 of the Broad-Based Black Economic Empowerment Act, 2003 (Act 53 of 2003);
- black people who are women and who are South African citizens;
- black people who are youth as defined in section 1 of the National Youth Development Agency Act, 2008 (Act No. 54 of 2008);
- black people who are people with disabilities as defined in section 1 of the Employment Equity Act, 1998 (Act No. 55 of 1998);
- black people who are military veterans as defined in section 1 of the Military Veterans Act, 2011 (Act No. 18 of 2011);
- black people who are living in rural or underdeveloped areas or townships;
- small enterprises as defined in section 1 of the National Small Enterprise Act, 1996 (Act No. 102 of 1996);
- Exempted Micro Enterprises (EMEs) as defined in terms of the code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003), with an annual turnover of R10 million or less (Amended Codes of Good Practice); and Qualifying Small Enterprises (QSEs) as defined in terms of the code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003) with an annual total turnover of between R10 million and R50 million.

i. <u>Guidance</u>

Guidance is anticipating where one might go wrong, or where one is doing a task in a complicated, inefficient or ineffective way, and giving help, advice and direction as to how to achieve a better result. Guidance is mostly given by a person in the direct reporting line, but can be given by anyone. Guidance is not imparting skills, but suggesting ways to improve performance.

ii. <u>Labour</u>

Persons:

a. who are employed by the Contractor or a Subcontractor in the performance of the Contract; and

b. who resides in the Project Area; and

c. whose monthly earnings are derived from hours worked for a fixed hourly rate which is adjusted from time to time by legislation (as a statutory minimum) and the Contractor's or Subcontractor's employment policies;

d. but who are not Targeted Labour.

Note:

The personnel employed by the suppliers of goods and material are notdefined as "Labour" for the purposes of this Contract.

(ii) Mentoring

Mentoring is a professional relationship in which an experienced business person assists another by giving advice and imparting their knowledge and wisdom in developing special skills and knowledge that will enhance the less experienced person's professional and personal growth. The objective is to equip the business owner and his team to improve their decision-making skills, being focused and make positive progress quickly.

(iii) Mobilization Period

The period from the Commencement Date until the physical commencement of the Works, as defined in the Conditions of Contract.

(iv) Project Area

The area through which the road under construction traverse or which is adjacent to and/or in proximity to project operations.

(v) Project Steering Committee (PSC)[4]

The Committee that represents the project's Stakeholders and the Communities affected by the project.

(vi) Community Liaison Officer (CLO)[5]

The person who acts as the liaison officer for the project. The CLO facilitates the employment of Targeted Labour and attends to the day to day project, Stakeholder, and Community matters that impact on the parties to the project.

(vii) Project Management Team (PMT)

The Team comprising the Employer's representative, i.e. the Project Manager,the Engineer and the Contractor, or their duly delegated representatives, whois jointly responsible for the successful execution of the project.

(viii) Stakeholders[6]

Any Person who is affected by the Employer's operations in the Target Area(s)

and/or who has an interest or concern in the project, either as a decision maker, participant or affected party and may include, amongst others, the following entities:

a. Relevant Municipal departments;

b. Traditional authorities;

c. Community interest groups;

d. Organised youth representation;

e. Organised women representation;

f. Organised disabled people representation;

g. Other structured community groups such religion, education, farming, etc.

h. Local transport industry forums, e.g. Bus and taxi;

i. Business sector forums;

j. Road user forums;

k. Environmental interest groups;

l. Road safety interest groups;

m. Any other recognized relevant and representative structure.

(ix) Subcontractor

An entity appointed by the Contractor to execute a portion of the Works as defined in the Conditions of Contract.

(x) Target Area

The geographic area defined in the Contract Data for Targeted Labour and which typically are:

a. one or more Local Municipalities;

b. one or more Wards that are predominantly located within an area and within a predefined radius of the construction activity;

c. one or more of the areas listed in the definition of Designated Groups.

Based on market research and/or resources and skills audits, the Contractor, in liaison with the PSC, could also identify and agree Target Areas where preference would be given to Targeted Enterprises from these areas for sub-contracting.

(xi) Targeted Enterprise[7]

A Targeted Enterprise is an entity to which the Contractor sub-contracts a percentage of the contract value as a condition of contract and which is:

i. an EME or QSE;
ii. an EME or QSE which is at least 51% owned by black people;
iii. an EME or QSE which is at least 51% owned by black people who areyouth;
iv. an EME or QSE which is at least 51% owned by black people who arewomen;
v. an EME or QSE which is at least 51% owned by black people withdisabilities;
vi. an EME or QSE which is 51% owned by black people living in rural orunderdeveloped areas or townships;
vii. a cooperative which is at least 51% owned by black people;
viii. an EME or QSE which is at least 51% owned by black people who aremilitary veterans; or
ix. more than one of the categories referred to in paragraphs a to h; and

which is tax and COID compliant.

Targeted Enterprise Construction Manager

The full-time staff member or service provider appointed by the Contractor todevelop, implement and monitor the training, development and support of Targeted Labour and Targeted Enterprises. The Targeted Enterprise Construction Manager also mentors, guides and coaches the Targeted Enterprises.

Targeted Enterprise Procurement Coordinator (TE Procurement Coordinator)

The person employed, or entity appointed, by the Contractor to facilitate theprocurement of Targeted Enterprises.

Target Group

It is a group of business entities and/or groups selected from the Designated Group as defined in the Preferential Procurement Policy Framework Act Regulations, 2017.

Targeted Labour[8]

Persons:

who are Employed by the Contractor or a Subcontractor in the performance of the Contract; and

whose monthly earnings are derived from hours worked for a fixed hourly rate which is adjusted from time to time by legislation (as a statutory minimum) and the Contractor's or Subcontractor's Employment policies; and

permanently reside in the Target Area(s) or who are recognized as being residents of the Target Area(s) based on identification andassociation with, and recognition by, the residents of the Target Area(s);and

who are defined as a Target Group in the Contract Data.

i. Training

Training refers to the process of teaching a Trainee, usually in a classroom orsimulated work environment situation where principles, skills, knowledge and theory are taught and demonstrations are given. Assignments are then set toensure that the Trainee can apply what has been taught. Training is done by a specialist in the subject, and who is qualified and accredited to train. The objective is to improve the competency of the participant.

a. Applicable Legislation, Regulations and Standards

The following Acts, as amended from time to time, are predominant amongst those which apply to the Construction Industry and are listed here for reference purposesonly:

i. The Constitution of South Africa;
ii. Public Finance Management Act, 1999 (Act No. 1 of 1999);
iii. Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000) and its regulations;
iv. Construction Industry Development Board Act, 2000 (Act No. 38 of 2000);
v. Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003).
vi. The South African National Roads Agency Limited and National Roads Act,1998 (Act No. 7 of 1998); and
vii. The Skills Development Act, 1998 (Act No. 97 of 1998).
viii. The following Standards and Practice Notes, as amended from time to time, are applicable in terms of Targeted Labour and Targeted Enterprises and are used fully or portions thereof:
ix. SANS 10845: 2015, Parts 5, 7 and 8; and
x. CIDB Standard for Contract Participation Goals for Targeted Enterprises and Labour through Construction Works Contracts, 31 October 2017.

D1003 TARGET GROUP PARTICIPATION

a) Objective

Amongst others, the key objectives of Government are to extend economic opportunities and build entrepreneurial capacity in rural or underdeveloped areas or townships by:

i. optimizing the utilization of local resources in the project area;
ii. developing these local resources in the execution of the project; and
iii. maximizing the amount of funds retained within the project area.

To give effect to these objectives the Contractor shall:

a. recruit Targeted Labour from the Target Area(s) as stated in the Contract Data; and
b. subcontract Targeted Enterprises based on market research and/or skills and

resources audits of the rural or underdeveloped areas or townships within the project area.

b) Targeted Labour Database

A Labour Database of Targeted Labour will be compiled by the community leaders (ward/ PR Councilors and/or mayoral community member or traditional leadership), with input from the Project Steering Committee (PSC). Once endorsed by the PSC, the CLO shall utilize this Database to source Targeted Labour as required by the Contractor.

The Labour Database shall be updated as and when required and as agreed with the PSC. Only Labour recruited from the Labour Database will be measured for Contract Participation Performance (CPP).

c) Targeted Enterprise Database

Following market research and/or a resources and skills audit of Targeted Enterprises in the project area, the Contractor shall apply the CPG criteria in the Contract Data to compile a ***preliminary*** Targeted Enterprise Database of eligible Targeted Enterprises.

To inform the market research and/or resources and skills audit, the Contractor shall use, as a minimum, National Treasury's CSD and the CIDB contractor database. Other databases, e.g. the Local Municipality's Economic Development database, may also be considered to determine the available resources and skills in the Project Area. The purposes of the preliminary Targeted Enterprise Database are:

i. for the PMT to determine if the required resources and skills to execute the identified Targeted Enterprise work packages are available in the anticipated Target Area(s);

ii. for the PSC to verify that Targeted Enterprises on the preliminary Targeted Enterprise Database are authentic in terms of the Contract Data and other Database criteria agreed with the Employer, Engineer and the PSC, and

iii. for the PSC to alert possible eligible or qualifying Targeted Enterprises that are not on the preliminary Database of the opportunity.

Based on the above considerations, additional criteria for the Targeted Enterprise Database may be agreed with the Employer, Engineer and PSC to ensure that the SMME enterprises is targeted as intended by the Employer.

Once the Targeted Enterprise Database has been agreed with the Employer and the Engineer, and endorsed by the PSC, the Contractor shall invite Targeted Enterprises to tender for the Targeted Enterprise work packages and preference shall be given to those Targeted Enterprises that adheres to the Database criteria.

Note:

a. The Targeted Enterprise Database shall be a "live database". In essence, it is thus not the Database that is approved by the PMT and endorsed by the PSC, but rather the ***criteria*** for compiling the Database.

b. Any Targeted Enterprise may respond to the invitation to tender, but preference shall be given to those Targeted Enterprises that adheres to the Database criteria, which shall be measured by means of a functionality evaluation.

The Targeted Enterprise Database criteria shall be updated at every instance that a new tender or group of similar tenders are being let for Targeted Enterprise work packages.

Targeted Enterprises within the Project Area shall be encouraged and assisted to register on the CSD and to be compliant with all other statutory requirements.

d) Contract Participation Goal (CPG)

The CPG is the monetary value of the targets set by the Employer and will be calculated as follows:

CPG = Final Contract Value x (% Targeted Labour + % Targeted Enterprise)

The Final Contract Value is the total value of the Contractor's final certified work measured at the date of issue of the Taking-Over Certificate. The Final Contract Value include the value of scheduled work and extra work but exclude any Contract Price Adjustment and adjustments for reduced payments, Rise and Fall, Retention Money, Penalties and VAT.

The value of the Prime Cost Sums scheduled under item D10.05 will not necessarily make up the full value of the works required to meet the minimum target set by the Employer for Targeted Enterprises and/or Targeted Labour. It is the Contractor's responsibility to assess the work required to meet the targets and, if necessary, to engage additional Targeted Enterprises and/or Targeted Labour to execute work on the Contract as well to ensure that the minimum targets are achieved.

e) Contract Participation Performance (CPP)

The CPP is the monetary value of the Contractor's actual progress towards achievement of the CPG calculated as follows:

CPP = total value (excluding VAT) of Targeted Labour contribution + total value of Targeted Enterprises contribution (excluding VAT)

The Contractor's CPP shall be monitored monthly to determine the extent to which it is striving to achieve the CPG. The basis of monitoring shall be the levels of the individual contributions for Targeted Labour, Targeted Enterprises and Target Groups. Monthly returns, in the format required by the Employer, shall be submitted

by the Contractor with each interim Payment Certificate.

To assist in the measurement of the CPP the Contractor shall include in its contract programme details of how the CPG will be achieved. The detail shall be provided not later than 1 (one) month after the Engineer has accepted the original construction programme and updated with every subsequent revision.

As an incentive to encourage the Contractor to exceed the CPG, a bonus is offered, measured as follows:

The bonus = 0.05 x (CPP – CPG)

Any bonus due (or portion thereof) shall be calculated on the Final Contract Value (excluding CPA). No bonus shall apply if either the Targeted Labour, Targeted Enterprises and/or any individual sub-targets for Target Groups are not reached.

Penalties for Targeted Labour and for Targeted Enterprises shall be calculated as follows:

Penalty Targeted Labour = 0.15 x (Sum (TL **n** – TG **n**) - 1.2 x L dp)

Where:

n= Each lowest order subgroup of Targeted Labour stipulated in the Contract Data.

TL= Monetary value of the Targeted Labour calculated at the percentage stipulated in the Contract Data applied to the final contract value (excluding VAT).

TG= Cumulative monetary value of Targeted Labour Employed on thecontract by the Contractor and all Subcontractors.

L dp= Cumulative monetary value of black Disabled Persons Employedon the Contract by the Contractor and all Subcontractors.

(TL n - TG n) = The monetary values calculated unless if any calculated value is negative, then it shall be a zero value.

Penalty Targeted Enterprises = 0.15 x (Sum (TE **n** – TGE **n**) - 1.2 x TE mv - 1.2 x TE$_{dp}$)

Where:

N	=	Each lowest order subgroup of Targeted Enterprise stipulated in the Contract Data.
TE	=	Monetary value (excluding VAT) of Targeted Enterprises calculated at the percentage stipulated in the Contract Data applied to the final contract value (excluding VAT).
TGE	=	Cumulative monetary value (excluding VAT) by Targeted

Enterprises subcontracted to the contract by the Contractor and 50% of the cumulative monetary value (excluding VAT) by Targeted Enterprise suppliers of goods and/or services.

TE mv = Cumulative monetary value (excluding VAT) by Targeted Enterprises being majority owned by black Military Veterans, subcontracted to the Contract by the Contractor.

TE dp = Cumulative monetary value (excluding VAT) by Targeted Enterprises being majority owned by black Disabled Persons,subcontracted to the Contract by the Contractor.

(TE **n** – TGE **n**) = The monetary values calculated unless if any calculated value is negative, then it shall be a zero value.

Total Penalty = Penalty Targeted Labour + Penalty Targeted Enterprises Penalty Targeted Labour = 0.15 x (D – D0) x CA100

Where:

D= the tendered contract participation goal percentage;

Do= the contract participation goal which the Employer's representative certifies, based on the credits passed, as being achieved upon completion of the contract;

CA = the contract amount;

P = the monetary value of penalty payable.

This formula is based on 10 points out of a total of 100 points being allocated to the contract participation goal so that the penalty is 1.5 times more severe than the points granted.

The total Penalty value shall be the sum of the Targeted Labour and Targeted Enterprises Penalty values unless the total Penalty value is negative then it shall bea zero value.

Interim penalty valuations should be calculated to interim Payment Certificate values(excluding VAT) to establish the anticipated final outcome, and to plan corrective actions, but must not be applied to the interim certificate value.

Any Penalty payable shall be calculated on, and applied to, the Final Contract Value.

f) Accredited Registration

The CPP for Targeted Enterprises shall only be accepted if the respective Targeted Enterprises comply fully with the definition of a Targeted Enterprise, and

documentary evidence to support the claim lodged with the Engineer before the work, goods or service may be considered as having been performed by a Targeted Enterprise. The responsibility for producing evidence of the respective documentation shall rest with the Contractor.

The Contractor shall assume responsibility for the compilation and maintenance of comprehensive records detailing each Targeted Enterprise's progress.

g) Contractor's Responsibility

In terms of the Conditions of Contract, all Targeted Labour recruitment and Employment and Targeted Enterprises subcontracting, as well as its associated risks, shall remain the sole responsibility of the Contractor. The Employers CPG requirements, and the compulsory utilization of project specific Targeted Labour and Targeted Enterprises databases, shall not relieve the Contractor of its obligations under the Contract and shall not attract any liability to the Employer.

D1004 STAKEHOLDER AND COMMUNITY LIAISON AND SOCIAL FACILITATION

a) Purpose

To give effect to the need for transparency and inclusion in the process of delivering services, the Contractor shall liaise with the project Stakeholders and affected Communities for the duration of the Contract's life cycle. This shall be achieved through structured engagement with the PSC which was established by the Employer for this purpose.

b) Contractor's Responsibility

i. Stakeholder and Community engagement shall be executed based on the Employer's social facilitation principles and processes.

ii. The Contractor shall make use of the PSC as the official communication channel, and utilize it to facilitate harmonious relationships, with project Stakeholders and affected Communities. The PSC shall be held accountable to disseminate project information discussed at the PSC to its respective constituencies.

iii. As a party to the functioning of the PSC, the Contractor shall delegate from among its site personnel a responsible person to serve on, and participate in, the PSC and its business.

iv. The Contractor shall provide the PSC with any assistance and information that it requires to execute its duties, e.g. training, meeting venue on site, Target Group reports, etc.

v. **Note:** in terms of the Conditions of Contract, all Targeted Labour recruitment and Employment, and Targeted Enterprises' selection and sub-contracting, as

well as its associated risks, shall remain the sole responsibility of the Contractor. The Employer's assistance in establishing a PSC and providing a CLO to the Contractor shall not relieve the Contractor of its obligations under the Contract and shall not attract any liability to the Employer.

c) Project Steering Committee (PSC)

A PSC has either been established prior to commencement of the Contract or shall be established as soon as possible by the Employer. The PSC consists of representatives of project Stakeholders and affected Communities. The Employer, Engineer and Contractor also become parties to the PSC at the relevant project stages and as far as it is within the scope of their respective roles and responsibilities.

PSC meetings shall be chaired by the nominated member from the PSC with consultation of the Employer representative in a facilitating capacity and not a decision-making capacity. The PSC will nominate within member's representative a secretariat to take minutes of PSC meetings. Representatives of project Stakeholders and affective Communities on the PSC may appoint a caucus chairperson.

Secretarial support other than taking minutes at PSC meetings shall be provided by the CLO.

d) Duties of the PSC

The PSC is the official communication channel through which the Employer, Engineer and Contractor communicates with project Stakeholders and affected Communities on project matters, as well as to communicate the impact that the project has or may have on project Stakeholders and the affected Communities.

The PSC is also the official communication channel through which project Stakeholders and the affected Communities communicates with the Employer, Engineer and Contractor on the impact that the project has on them, or is anticipated to have on them, or on any other project matters.

The Department of Police, Roads and Transport Project Facilitating Unit Guidelines requires of the PSC to execute specific duties during each stage of the project, i.e. from project initiation to project completion. Some of these duties overlap project stages and hence, a detailed description is provided here.

i. <u>Project Construction Stage</u>

a. Meet formally prior to the monthly site meeting, or as may be required, to discuss and resolve project matters, which are of interest or concern to project Stakeholders and the affected Communities, the Employer, the Engineer and/or the Contractor.

b. Give input to the PMT in establishing the eligibility and preference criteria to employ Targeted Labour and subcontract Targeted Enterprises and endorse the agreed criteria.

c. Peruse and endorse the Project Databases compiled by the PMT from which Targeted Labour will be Employed and Targeted Enterprises will be subcontracted.

d. Verify that the criteria and methodologies applied by the Contractor to employ Targeted Labour and subcontract Targeted Enterprises were executed in a fair and transparent manner, and within the Employer's and Government's Supply Chain Management Policies.

e. Verify that the conditions of Employment and the conditions of subcontracting, in the Employment of Targeted Labour and subcontracting of Targeted Enterprises were applied in a fair and transparent manner and according to the Employer's Employment and subcontracting requirements.

f. Make recommendations to the PMT on the training needs, eligibility criteria and selection criteria, for the provision of training to Targeted Labour, Targeted Enterprises, Designated Groups, project Stakeholders and the affected Communities.

g. Observe and verify that training programmes and support programmes, which the Contractor committed to, are implemented and executed as intended.

h. Inform the entities whom they represent of any project matters which the PMT wishes to communicate with project Stakeholders and the affected Communities.

i. Inform the entities whom they represent of any project matters that are impacting or may impact, either positively or negatively, on project Stakeholders and the affected Communities.

j. Inform the PMT of Stakeholder and/or Community requests and/or needs, which could possibly be addressed within the project's Scope of Work.

k. Inform the PMT of any road safety concerns within the project area(s) and advice the PMT of possible mitigating measures and/or road safety programs that will be most feasible for acceptance by the affected Communities to promote road safety.

l. Inform the PMT of any project matters that are impacting, or are anticipated to impact, negatively on project Stakeholders and the

affected Communities.

m. Agree with the PMT on a dispute resolution mechanism to resolve any disputes that may arise between the PMT and the PSC, project Stakeholders and/or affected Communities.

n. Assist the PMT to liaise with project Stakeholders and the affected Communities to resolve any disputes between the Employer, Engineer and/or Contractor and project Stakeholders and the affected Communities, which occurred due to the project.

e) Duties of the CLO

The CLO shall facilitate the Employment of Targeted Labour and shall coordinate communication between the PMT and the PSC to address the day to day project, Stakeholder, Community and labour matters that impact on the parties to the project.

The Department of Police, Roads and Transport Project Facilitation Unit Guidelines requires of the CLO to execute specific duties during each stage of the project, i.e. from project initiation to project completion. Some of these duties overlap project stages and hence, a detailed description is provided here.

The CLO shall execute the following duties:

i. Except for taking the minutes of PSC meetings, which is a duty of the nominated secretariat by the PSC, the CLO shall provide a secretariat function to the PSC which includes, amongst others, the following:

a. Schedule meetings;

b. Compile meeting agendas;

c. Compile document packages for meetings;

d. Distribute minutes of meetings;

e. Assist PSC to formulate their communication in writing;

f. Distribute written communication to and from the PMT and the PSC;

g. Keep records of all the above and any other PSC documentation; and

h. Provide any other reasonable secretariat function pertaining to the PSC.

ii. Attend all PSC meetings to report on the day to day project, Stakeholder and Community matters that impact on the parties to the project.

iii. Attend all monthly site meetings to report on the day to day project, Stakeholder and community matters that impact on the parties to the project.

iv. Attend any other meetings related to the project and in which any of the project Stakeholders, affected Communities, Targeted Labour and Targeted

Enterprises are involved.

v. Maintain a full-time presence on site to monitor and address the day to day project, Stakeholder and Community matters that impact on the parties to the project.

vi. Maintain a full-time presence on site to assist the PMT in the day to day liaison with project Stakeholders and affected Communities.

vii. Typical information to be disseminated by the CLO includes:

a. basic Scope of the Works and how it will affect the Community;

b. project programme and regular progress updates;

c. anticipated Employment and subcontracting opportunities;

d. project programme as it pertains to the Employment of Targeted Labour and subcontracting of Targeted Enterprises;

e. Occupational Health and Safety precautions; and

f. any other information relevant to project Stakeholders and the affected Communities.

viii. Be well acquainted with the contractual requirements as it pertains to Targeted Labour Employment and training requirements.

ix. Assist the PMT and PSC to establish and agree the eligibility and selection criteria to be followed when Employing Targeted Labour.

x. Assist the PMT in its resources and skills audits by providing a coordinating function between the PMT, project Stakeholders, and the affected Communities.

xi. Ensure that Targeted Labour databases, compiled from the resources and skills audits, are based on the agreed eligibility and selection criteria and that it is updated as and when required.

xii. Coordinate the selection and Employment of Targeted Labour based on the agreed eligibility and selection criteria and based on the Contractor's labour requirements.

xiii. Ensure that each Targeted Labourer enters into an Employment contract which adheres to current and relevant Labour legislation.

xiv. Ensure that each Targeted Labourer understands the conditions of his/her Employment with an emphasis on the Employment start date, end date and wages payable.

xv. Identify and inform the PMT of any relevant training required by the Targeted

Labour.

xvi. Attend all disciplinary proceedings to ensure that hearings are fair and conducted in accordance to the current and relevant Labour legislation.

xvii. Be proactive in identifying PSC, project Stakeholder, affected Communities (including Targeted Labour and/or Targeted Enterprise Subcontractor), requirements, disputes, unrest, strikes, etc. and bring it to the attention of the PMT.

xviii. Assist the PMT to liaise with the PSC, project Stakeholders and the affected Communities to resolve any disputes, which occurs due to the project.

xix. Other than the document records to be kept as mentioned in (i) above, keep record of all other documents and processes pertaining to the Employment of Targeted Labour and any other records that may be of relevance to the functions of the PSC.

xx. Produce and submit a monthly report to the PMT and the PSC on PSC meetings, other meetings attended by the CLO, Targeted Labour employment, and project Stakeholder, affected Community and any other project matters that impact on the parties to the project.

D1005 MOBILIZATION PERIOD

During the site establishment stage, but prior to the commencement of the Works, the Contractor or its authorised representative, shall become acquainted with the lines of communication and the agreed dispute resolution mechanism between the PMT, PSC, project Stakeholders and affected Communities. The Contractor shall also follow the agreed eligibility and qualifying criteria and processes and procedures to employ Targeted Labour and subcontract Targeted Enterprises.

a. Duties of the Contractor

During the Mobilization Period, the Contractor shall, where required, execute the following duties:

i. For the subcontracting of Targeted Enterprises:

a. Liaise with the Employer, Engineer and PSC to structure and finalize the work packages to be subcontracted to Targeted Enterprises.

b. Liaise with the Employer, Engineer and PSC to determine the Targeted Enterprise Database criteria for the subcontracting of Targeted Enterprises.

c. Compile the Targeted Enterprise Database(s) for endorsement by the PSC.

d. Undertake a skills audit of the Targeted Enterprises which appear on the Targeted Enterprise Database(s).

e. Based on the skills audit, and in consultation with the Employer, Engineer and PSC, identify the pre-tender training requirements of Targeted Enterprises.

f. Provide an opportunity to Targeted Enterprises to receive the identified pre-tender training.

g. Tender the initial work packages and subcontract the first group of Targeted Enterprises for commencement of the Works.

ii. For the Employment of Targeted Labour:

a. Liaise with the Employer, Engineer, PSC and CLO to compile the Labour Database(s) for the Employment of Targeted Labour.

b. Undertake a skills audit of the Targeted Labour which appear on the Targeted Labour Database(s).

c. Based on the skills audit, and in consultation with the Employer, Engineer, PSC and CLO, identify the training requirements of Targeted Labour to make them more Employable. Provide an opportunity to eligible Targeted Labour to receive theidentified training to enable them to be more Employable.

d. Select and appoint the first group of Targeted Labour for commencement of the Works.

iii. Produce an acceptable CPG Plan, which sets out how the Contractor intends to achieve the various CPG targets as stated in the Contract Data, complete with dates, work packages and values of work.

Notes:

(i) The accepted CPG Plan and any amendments thereof shall be made available to the PSC for their monitoring purposes.

(ii) The Employer and the Engineer shall monitor progress and adherence to the CPG Plan in the same manner as they would monitor the works programme.

(iii) It is acknowledged that all training requirements cannot be addressed during the Mobilization Period and that training will take place over the duration of the Contract.

(iv) The training provided to both Targeted Enterprises and Targeted Labour during the Mobilization Period shall focus on the activities and/or skills required for the commencement of the Works and shall include the mandatory

Occupational Health and Safety training.

The Mobilization Period shall only be concluded once the CPG Plan has been accepted by, and all the duties above have been executed to the satisfaction of, the Employer and the Engineer.

Note:

The Mobilization Period was introduced as an aid to the Contractor to allow for his planningto obtain the CPG as required in the Contract Data. An extension of the Mobilization Period will therefore not form grounds for an extension of the Contract duration and hence, any costs incurred by the Contractor for an extension of the Mobilization Period shall be for the Contractors cost. Should an extension of the Mobilization Period result in a delay of the Contract, the Employer's delay penalties shall apply.

D1006 PROJECT MANAGEMENT TEAM (PMT)

The PMT, which consists of the Employer, Engineer, and the Contractor, or their representatives, is a party to the PSC and is co-responsible for successful project Stakeholder and Community liaison. The PMT is also responsible for the successful implementation of the Employer's Targeted Labour and Targeted Enterprise utilization and development goals.

a) Duties of the Employer and the Engineer

To implement the Employer's Targeted Labour and Targeted Enterprise goals, and as members of the PMT, the Employer and the Engineer shall provide support the Contractor by executing the following duties:

i. Make recommendations to the Contractor in the identification and structuring of the work packages to be subcontracted to Targeted Enterprises, and agree to the scope and extent of the work packages.

ii. Verify that the Targeted Enterprise Database(s) has been updated prior to the letting of every new set of subcontracts.

iii. Endorse all Databases and approve tender procedures, tender documents, tender submission requirements and adjudication processes for the subcontracting of Targeted Enterprises.

iv. Review all tender adjudication reports and monitor that the criteria and procedures applied by the Contractor to subcontract Targeted Enterprises are executed in a fair and transparent manner, and are within the Employer's and Government's Supply Chain Management Policies.

v. Endorse subcontract agreements and ensure that the conditions of subcontracting with Targeted Enterprises are fair and transparent and within

the prescripts of the Contract requirements.

vi. Monitor the management of Targeted Enterprise subcontracts and ensure that conditions such as the application of penalties, the termination of contracts, etc. are applied in a fair and transparent manner and within the prescripts of the agreement.

vii. Verify that the Labour Database(s) from which Targeted Labour will be Employed is updated prior to every new Labour intake.

viii. Monitor that the criteria and procedures applied by the Contractor to employ Targeted Labour are executed in a fair and transparent manner, and is within the Contract requirements.

ix. Monitor that the conditions of Employment of Targeted Labour are applied in a fair and transparent manner and within the prescripts of the current and relevant Labour legislation.

x. Make recommendations to the Contractor in the identification of the training requirements of Targeted Labour and Targeted Enterprises and approve the proposed training programmes.

xi. Monitor that training programmes and support programmes, which the Contractor committed to, are implemented and executed as intended.

D1007 TENDER PROCESS FOR TARGETED ENTERPRISES

While the Contractor may utilise service providers, sub-contractors and suppliers of its choice and selected via its own internal processes, for the subcontracting of Targeted Enterprises based on the Employer's Contract Participation Goals, the Contractor shall follow the prescripts of this Section D, with specific reference to D1003 to D1007.

The Contractor shall appoint a Targeted Enterprise Procurement Coordinator (TE Procurement Coordinator) to facilitate the subcontracting of work to Targeted Enterprises as listed in the Contract Data. For Contracts with a value of less than R 100 million the Contractor may appoint a TE Procurement Coordinator from its site staff. For Contracts with a value of more than R 100 million the Contractor shall employ or subcontract a dedicated TE Procurement Coordinator, whose sole responsibility will be the management of Targeted Enterprise procurement and sub-contracting matters.

The TE Procurement Coordinator shall be knowledgeable with, and has experience in, the management of road construction and ancillary works, National Treasury supply chain management legislation and regulations, and stakeholder relations management.

The TE Procurement Coordinator shall develop and establish the eligibility and functionality criteria and tender processes and procedures for subcontracting, which shall adhere to theEmployer's and Government's Supply Chain Management Policies and requirements as set out in the

Contract Data and which shall be approved by the PMT and endorsed by the PSC.

The establishment and implementation of the eligibility and functionality criteria, and tender processes and procedures for subcontracting include, amongst others, the following tasks:

(i) Tender Preparation

a. Compile preliminary list of subcontracting packages.

Based on the Contract Data and the Scope of the Works, the Contractor shall compile a preliminary list of the work packages (types and number) that are anticipated to be subcontracted to Targeted Enterprises.

The Contractor shall refer to the construction activities that has been identified as being suitable for construction by Targeted Enterprises as listed in D1009 of these Project Specifications, and to any other construction activities which are required to execute the Works in terms of this Contract, to determine how to unbundle or package subcontracts for Targeted Enterprises.

b. Conduct a resources and skills audit.

Based on the preliminary list of work packages, the Contractor shall conduct a resources and skills audit to determine the availability of the required resources and skills in the Project Area. The Contractor shall consult the following databases as a minimum:

a. Construction Industry Development Board (CIDB) contractor database.

b. Municipal Local Economic Development (LED) department.

c. National Treasury's Central Supplier Database (CSD).

d. Identify Targeted Enterprises, Target Groups and Target Area(s).

Based on the resources and skills audit, the Contractor shall identify the Targeted Enterprises (CIDB grades and types), Target Groups (woman, youth, etc.) and the Target Area(s) which are anticipated to benefit from the subcontracting opportunities.

e. Compile a Contract Participation Goal (CPG) Plan.

Based on the information in paragraphs i. to iii. above, the Contractor shall compile a CPG Plan which contains a list of work packages (types and number) to be subcontracted to Targeted Enterprises, as well as the eligibility and functionality criteria and preliminary Targeted Enterprise Database(s) foreach work package.

f. Table CPG Plan to the PMT and the PSC

Following the stakeholder and community liaison process described in D1004, the Contractor shall table the CPG Plan to the PMT for its

approval and to the PSC for its endorsement.

The Contractor shall ensure that the tender requirements and the outcome ofdifferent tendering scenarios are explained to the PSC, specifically withrespect to the outcomes of:

g. Functionality structuring and scenarios,

h. Price and Preference,

i. Eligibility criteria, and

j. Negotiation processes (if applicable).

If required, the Contractor shall make amendments to the CPG Plan based onthe PMT's instructions and/or the PSC's recommendations.

k. Alert Targeted Enterprises of the opportunities and establish a helpdesk.

The Contractor shall alert Targeted Enterprises of the subcontracting opportunities and inform them of the eligibility and functionality criteria by making it known in local newspapers and on community notice boards.

The Contractor shall establish a helpdesk at a suitable and easy accessible location to provide guidance to Targeted Enterprises to get their statutory requirements in order in anticipation of the subcontracting opportunities.

l. Compiling tender documents.

The Contractor shall compile the Targeted Enterprise tender documents for each subcontract package. If the Employer have a pro-forma tender document available, the Contractor shall use this document.

In compiling the subcontract tender documents, the Contractor shall include in each tender document any Conditions of Tender that may be relevant, and shall also include the subcontract agreement. The Contractor shall compile each subcontract tender document in a manner that facilitates the achievement of all objectives and principles pertaining to the development ofthe Targeted Enterprises.

The draft subcontract tender documents shall be approved by the PMT beforetheir use.

(i) **Tender Process**

(ii) Advertise the subcontract packages.

The Contractor shall advertise the subcontract packages and

invite Targeted Enterprises to tender for the respective subcontract packages. Advertisements shall be placed in local newspapers, on community notice boards, local radio stations (if available) and any other place or medium as agreed with the PSC.

If the Employer have a pro-forma of a Tender Notice available, the Contractor shall use this document without the employer's logo attached to it, only contractor's logo.

m. Conduct a tender briefing and tender training session where necessary.

For each subcontract package, the Contractor shall conduct a compulsory briefing session to explain the Scope of the Works, as well as the eligibility and functionality criteria and tender process, to the Targeted Enterprises.

An Attendance Register shall be completed by all attendees and Minutes shall be taken during the briefing session. The Minutes of the briefing session shall be distributed to all attendees as an Addendum to the Tender Documents.

The Contractor shall conduct a tender training session as a component of the tender briefing to interested Targeted Enterprises. Minimum tender submission documents.

It shall be a condition of tender that Targeted Enterprises include in their tender submissions the following documentation (if applicable, based on the CIDB grade required):

(i) Proof of the Tenderer's B-BBEE contribution level.

(ii) Proof that the Tenderer is an EME entity.

(iii) Proof that the Tenderer is registered on National Treasury's CSD.

(iv) Proof that the Tenderer is compliant with the COID act.

(v) Proof that the Tenderer is tax compliant.

(vi) Proof that the Tenderer is registered with the CIDB in the required grading and class (not applicable to suppliers).

n. Tender closure and opening of tenders.

Tenders for the subcontract packages shall close at a stipulated time and date. Tenders shall be placed in a formal Tender Box, of a design approved by the PMT, and located at the Contractor's site office.

The tender opening shall be conducted by the Contractor who shall

publicly announce and record the names of all bidders and their tender prices.

c. **Tender Evaluation**

The Contractor shall evaluate the tenders and it shall be a condition of tender that tenders will only be accepted from Targeted Enterprises that fully comply with the definition of a Targeted Enterprise as described in the Contract Data.

The Contractor shall evaluate the tenders based on (1) Compliance, (2) Eligibility, (3) Functionality and (4) Price and Preference.

a. **Stage 1 – Functionality**

Note that no Targeted Enterprise may be prohibited from responding to the invitation to tender, however, preference shall be given to those Targeted Enterprises that adheres to the Targeted Enterprise Database criteria by means of a functionality evaluation. For this reason “locality” and “CIDB grading and class” forms part of the functionality criteria and a higher weighting shall be allocated to these two criteria

Functionality shall be scored based on:

(i) Locality (target area)

(ii) CIDB grade and class (targeted entity)

(iii) Experience (if applicable)

(iv) Plant and equipment (if applicable)

(v) Any other relevant and agreed Designated Groups, e.g. woman, youth,etc.

Tenderers have to score a minimum number of points for functionality, e.g. 60/100 and tenderers that do not obtain the threshold are not further evaluated. The minimum number of points or threshold shall be established by the Contractor in consultation with the PMT and may vary depending on the Works to be subcontracted or any other valid considerations.

b. **Stage 2 – Price and Preference**

Tenderers that obtained the minimum threshold for functionality shall be further evaluated on their Price and Preference submissions, i.e.

i. Price= 80 %

j. Preference= 20 %

The highest scoring tenderer for each subcontract package shall be checked for eligibility.

The Contractor shall state in the tender advertisement and in the tender documents that only one subcontract package shall be awarded to an individual entity at any one time per project, meaning that a Targeted Enterprise may be awarded a work package and on conclusion thereof may be awarded a subsequent work package, but more than one work package may not be awarded simultaneously for an individual project.

If a tenderer tendered for more than one subcontract package and scored thehighest points in more than one package, the Contractor shall award to the tenderer the work package that has the most economic benefit to the Employer.

c. **Stage 3 – Eligibility Check**

Conventionally, eligibility is the first criteria to be checked during a tender evaluation process. However, in the case of Targeted Enterprises, which are typically of CIDB grades CE1 to CE4, the eligibility check often results in a substantial number of tenderers to be partially compliant or non-compliant.

Subsequently, the evaluator has to engage with a number of tenderers to resubmit proof of valid documents, which is not only a tedious task, but often results in confrontation, especially if tenderers are informed that they have been found non-compliant during the first stage of the evaluation process.

With eligibility being the last check, the evaluator only have to engage with the preferred tenderers for each subcontract package, should any documents need to be verified and/or resubmitted.

The highest scoring tenderer for each subcontract package shall be checked for eligibility with respect to the following criteria (if applicable, based on the CIDB grade required):

(i) Proof of the Tenderer's B-BBEE contribution level.

(ii) Proof that the Tenderer is an EME or QSE entity.

(iii) Proof that the Tenderer is registered on National Treasury's CSD.

(iv) Proof that the Tenderer is compliant with the COID act.

(v) Proof that the Tenderer is tax compliant.

(vi) Proof that the Tenderer is registered with the CIDB in the requiredgrading and class (not applicable to suppliers).

If the highest scoring tenderer fails to meet any of the eligibility criteria, he willbe given predetermined number of calendar days to become compliant. The number of calendar days shall be agreed with the PMT and the PSC, with a default of 5 days.

If the highest scoring tenderer fails to submit the requested information in therequired timeframe, he shall be deemed non-compliant and the evaluator shallcheck the second highest tenderer for eligibility. This process is repeated until a preferred tenderer is identified to be proposed in the Tender Report.

d. **Appoint successful Targeted Enterprises**

a. Table the Tender Report to the PMT and the PSC.

The Contractor shall table the Tender Report for each subcontract package tothe PMT and the PSC for their endorsement prior to award of the subcontract.

b. Negotiating rates with Targeted Enterprises.

c. Rates

If the Contractor has tendered rates for work items in the subcontract package and the tenderer who scored the highest points tendered higher rates than that of the Contractor, The Contractor may enter into negotiation with the tenderer.

If the Contractor fails to negotiate a feasible rate with the tenderer, he may:

(i) approach the next highest point scoring, compliant tenderer for negotiation, after it has been tabled to the PSC; or

(ii) obtain the Employer's approval to utilise the provisional sum (if applicable), which has been provided to make provision for the Preliminary and General items of Targeted Enterprises and/or to compensate for the differences between the rates of the Contractor and that of Targeted Enterprises. The Employer shall not approve rates that is higher than 25% of that of the Contractor.

d. Provisional Sum

If the Employer has provided a provisional sum for the work items in the subcontract package, the Contractor shall report on the feasibility of the higher points scoring tenderer's rates to the PMT.

(i) If the highest points scoring tenderer's rates are deemed

feasible, the Contractor shall obtain the Employer's approval to utilise the provisional sum provided for the work items.

(ii) If the highest points scoring tenderer's rates are deemed not feasible and the Employer does not approve the utilization of the relevant provisional sum, the Contractor may enter into negotiation with the preferred tenderer for a feasible rate.

iii. Low rates and/or tenders submitted by Targeted Enterprises.

The Contractor shall report to the PMT on the feasibility of rates and/or provisional sums of tenderers whom tendered exceptionally low rates and/or provisional sums. Exceptionally low rates and/or provisional sums are those that are more than ten percent (10%) less than what the Contractor tendered,or would have tendered in the case of a provisional sum.

(i) If the rates and/or provisional sums of those tenderers who tendered exceptionally low rates and/or provisional sums are deemed feasible, the Contractor may continue to include these tenders in his tender evaluation.

(ii) If the rates and/or provisional sums of those tenderers who tendered exceptionally low rates and/or provisional sums are deemed not feasibly, the Contractor may disqualify these tenders from his tender evaluation.

Note: The Employer strongly discourages the appointment of Targeted Enterprises that did not tender feasible rates and/or provisional sums.

Payment to the Contractor

i. The Employer shall not remunerate the Contractor for accepting higher rates and/or provisional sums tendered by Targeted Enterprises.
ii. If the Employer provided a provisional sum for preliminary and general items of Targeted Enterprises and/or to compensate for the differences between the rates of the Contractor and that of Targeted Enterprises, the Employer shall limit its remuneration to the Contractor to the sum provided.
iii. The Employer shall only approve the utilisation of provisional sums if it is satisfied that the rates and/or provisional sums of Targeted Enterprises are feasible and that the provisional sum is utilised for its intended purposes.
iv. The Contractor's TE Procurement Coordinator shall assist successful Targeted

Enterprises to enter into a subcontract agreement with the Contractor.

D1008 GENERAL RESPONSIBILITIES OF THE CONTRACTOR TOWARDS TARGETED ENTERPRISES

The Contractor shall have the responsibilities described in this Section, D1008, towards all Targeted Enterprises subcontracted in terms of the Contract Participation Goals stated in the Contract Data.

The Contractor shall appoint a dedicated Targeted Enterprise Construction Manager (TE Construction Manager) whose sole responsibility shall be to assist with the execution of its responsibilities towards Targeted Enterprises and Target Groups as prescribed in this Section D, with an emphasis on D1008 and D1010. Amongst others, the TE ConstructionManager shall facilitate the training, mentoring, development and support of Targeted Enterprises.

The TE Construction Manager shall have as a minimum a National Diploma: Managementof Civil Engineering Construction Processes (NQF Level 5) or equivalent qualification and shall have at least 5 years' experience as a Site Agent, managing construction processesin the fields of roads maintenance, new roads construction, roads rehabilitation, structures,etc. In addition, he shall have ample knowledge of, and experience in, the requirements of training and mentoring in the road construction environment.

The TE Construction Manager shall have on his team one (1) TE Site Supervisor for every six (6) Targeted Enterprises which are in their respective construction phases and one (1) Senior TE Supervisor for every six (6) TE Site Supervisors. The qualifications and/or experience of TE Site Supervisors and Senior TE Supervisors shall be relevant and of a suitable level to enable them to supervise the level of Targeted Enterprise and the specific works under construction. Below is an indicative organogram of the TE Construction Manager and his team.

The TE Construction Manager shall develop and establish a Targeted Enterprise Training, Development and Support Programme, which shall be approved by the PMT and endorsed by the PSC prior to implementation, and which shall adhere to Government's and the Employer's Transformation and Supply Chain Management Policies and principles.

a) General Obligations

The Contractor shall, with the assistance of the TE Construction Manager, comply with the following obligations:

i. Assist the Targeted Enterprises in instituting a quality assurance system;

ii. Provide adequate training, coaching, guidance, mentoring and any other identified and approved assistance to Targeted Enterprises;

iii. Provide support and any other identified and approved assistance to ensure that the Targeted Enterprises meet their obligations and commitments with respect to their subcontracts, and

iv. Ensure that the CPG objectives are achieved.

b) Subcontract Agreements

The Contractor, in liaison with the PMT, shall conclude the subcontract agreements and provide the necessary management support to the Targeted Enterprises. The subcontract agreements shall be in accordance with the provisions of amended sub-clause 4.4 of the Conditions of Contract and shall be consistent with the terms and conditions of this Contract.

A copy of each subcontract agreement shall be filed with the Engineer after the PMT has confirmed that it is in accordance with the provisions of this Contract and after it has been endorsed by the PSC.

Note:

To protect Targeted Enterprises' competitive advantage and/or tender strategy, only the main subcontract agreement shall be available to the PSC for endorsement and not the pricing structure and/or Schedule of Quantities.

The subcontract agreement shall be the SAFCEC subcontract agreement, which shallalso include for the following:

i. The allowable sources from which Labour may be drawn in terms of the Contract;

ii. The terms and conditions relating to the recruitment, Employment and remuneration of Labour engaged on the Contract;

iii. The terms and conditions relating to payment of the Targeted Enterprise;

iv. Sanctions in the event of failure by the Targeted Enterprise to comply with the terms and conditions of the subcontract agreement; and

v. Dispute avoidance and resolution procedures.

Note:

Special Conditions of Contract shall only be applied once approved by the PMT.

c) Quality of Work and Performance of Targeted Enterprises

The Contractor shall closely monitor and supervise all Targeted Enterprises and shall train, coach, guide, mentor and assist each Targeted Enterprise in all aspects of management, execution and completion of its subcontract. This shall typically include assistance with planning of the Works, sourcing and ordering of materials, labour relations, monthly measurements and invoicing procedures. The extent and level of such training, coaching, guidance, mentoring, and assistance to be provided by the Contractor shall commensurate with the level of subcontract applicable and shall be directed at enabling the Targeted Enterprise to achieve the successful

execution and completion of its subcontract.

The Contractor shall give reasonable warning to the Targeted Enterprise when any contravention of the terms and conditions of the subcontract has occurred or appears likely to occur. The Contractor shall, whenever feasible, give the Targeted Enterprise reasonable opportunity to make good any such contravention, or to avoid such contravention, and shall render all reasonable assistance to the Targeted Enterprise in this regard.

d) Dispute Avoidance and Resolution Procedures

When any disputes arise as provided for in the subcontract, the Contractor shall explain fully to the Targeted Enterprise that such actions are provided for in the subcontract. If such action is contemplated this shall be discussed with the PMT before any action is taken and communicated with the PSC as soon as action has been taken.

If the Targeted Enterprise, in the opinion of the Engineer, fails to comply with any of the criteria listed below, the Engineer shall issue a written warning to the Contractor, stating all the areas of non-compliance. A copy of the letter of warning shall be forwarded to the Employer. The criteria are as follows:

i. Acceptable standard of work as set out in the specifications;

ii. Progress in accordance with the time constraints in the Targeted Enterprise's tender document;

iii. Punctual and full payment of the workforce and suppliers;

iv. Site safety; and

v. Accommodation of traffic.

The Targeted Enterprise shall have 21 days from the date of receipt of the letter of warning by the Contractor to address and rectify the issues raised by the Engineer, except for sub-clauses (iv) and (v) above, for which the reaction time shall be in accordance with the relevant specifications for those aspects of the Works, but which shall not be longer than 24 hours. Failure by the Targeted Enterprise to comply with a deadline, will be sufficient grounds for the Contractor to apply a penalty or terminate the subcontract provided that the PMT is satisfied that the Contractor has made every effort to correct the performance of the Targeted Enterprise.

The Targeted Enterprise shall have the right to dispute any ruling given or deemed to have been given by the Contractor, Engineer or Employer. Provided that, unless the Targeted Enterprise shall, within 21 days after his receipt of a ruling or after a ruling shall have been deemed to have been given, give written notice (hereinafter referred to as a Dispute Notice) to the Contractor, referring to the relevant clause(s)

in the subcontract agreement, disputing the validity or correctness of the whole or a specified part of the ruling, he shall have no further right to dispute that ruling or the part thereof not disputed in the said notice.

D1009 WORK SUITABLE FOR EXECUTION BY TARGETED ENTERPRISES

The following work items have been identified as suitable for execution by Targeted Enterprises to assist the Contractor in achieving its CPG:

a) Clearing and grubbing.

b) Construction and clearing of drains.

c) Installation of prefabricated culverts including inlet and outlet structures.

d) Concrete channelling and concrete linings for open drains.

e) Construction of small concrete and other structures.

f) Pitching, stonework and protection against erosion.

g) Construction of gabions.

h) Erection of guardrails.

i) Landscaping.

j) Finishing the road and road reserve.

k) Site Security Services (consider Military Veterans if identified by Empowerment Impact Assessment).

l) Add other work types including work that may form part of the main activities to meet the minimum CPG target(s).

m) Any other work identified by the Employer to be executed in the Target Area.

From the above work items, the following have been identified as suitable for execution byCIDB CE1 and CE2 Targeted Enterprises:

i. Concrete sidewalks.

ii. Side drains.

iii. Clearing and grubbing.

iv. Construction and clearing of drains.

v. Any other work identified by the Employer to be executed in the Target Area.

Note:

A Prime Cost Sum for the work listed as (i) to (vi) is allowed under pay item D10.05, but where pay items for all or some of the listed work are scheduled, the quantities have been reduced in line with the Prime Cost Sum amount scheduled.

The work to be carried out by Targeted Enterprises is not limited to the work listed above and the Contractor may need to engage Targeted Enterprises on other aspects of the Works to achieve the CPG.

D1010 TRAINING, COACHING, GUIDANCE, MENTORING and assistance

a) Purpose of the Training and Skills Development Programme(s)

Skills development forms an integral part of the Employer's Transformation and Community Development Policies and hence, it is important to the Employer that Targeted Labour and Targeted Enterprises be equipped with skills that can be usedto gain meaningful future Employment and secure subcontracting opportunities.

It is, therefore, a requirement of this Contract that the Contractor provide adequate Training, Coaching, Guidance, Mentoring and assistance to the Targeted Labour and Targeted Enterprises, to ensure skills development within the Construction Industry.

The Contractor shall, in collaboration with the PMT, develop a Training and Skills Development Programme(s) which shall be managed by the Contractor's TGDC.

b) Skills Audit and Analysis

Prior to developing the Training and Skills Development Programme(s), the Contractor shall conduct a Skills Audit and Analysis of its own Employees and those of its Subcontractors to determine their levels of education, existing qualifications, and skills sets. The outcome of the Skills Audit and Analysis shall be used to developa Training and Skills Development Programme(s) that will benefit both the Employee and the Construction Industry at large.

Included in the Skills Audit and Analysis shall be a separate section, analyzing the education, qualifications and skills sets of the Targeted Enterprises subcontracted by the Contractor to develop a Training and Skills Development Programme(s) thatwill develop and improve the ability of small business owners and their supervisory staff to better manage their enterprises.

c) Developing the Training and Skills Development Programme(s)

The employer shall be involved in the decision making and quality control pertainingto the development and implementation of the Training and Skills Development Programme(s) facilitated through this Contract.

The Employer has no service agreement or memorandum of understanding with any education and training quality assurance body and, therefore, does not function as the "Employer" as defined under any three-party-agreement between the Trainee, the Training Provider and the Employer.

However, the Employer requires similar outcomes to that of formal learnership

programmes and the Contractor shall structure a Training and Skills Development Programme(s) in a manner that permits continued access to further learning and qualifications within a defined programme.

The complete Training and Skills Development Programme shall be approved by the PMT and endorsed by the PSC before any training commence.

d) The Training Service Provider

While the Contractor's TE Construction Manager will manage the Training, Development and Support Programme(s) and mentor subcontractors from a practical point of view, the Contractor shall subcontract a Training Service Provider to implement the theoretical training components of the Programme(s) by applying the Employer's Supply Chain Management Policy for second tier procurement.

The Training Service Provider entity shall be ***accredited***, and have in its employ ***Practitioners, Assessors and Moderators whom are registered***, with the ***Construction Education Training Authority (CETA).*** The Service Provider must be ***sourced locally*** within the Municipality borders, should it not deemed applicable within borders, the district Municipality would be added and ultimately the Free State Province will be added. Proof of accreditation and registration shall be current, valid and list the NQF levels and Unit Standards for which the entity andits staff are accredited.

The training and competency levels required of the Training Service Provider and its staff are provided in the table below:

a. Generic Skills Training

Generic skills shall be taught where the need has been identified and approved bythe Employer and/or the Engineer.

The Contractor shall make representation to the PMT, who shall approve candidatesthat should attend such courses as they deem appropriate. Those selected shall receive formal generic skills training in a programmed and progressive manner. The PSC and/or the PMT may also identify a need for generic skills training.

Typical training programmes could comprise some or all of the following modules:

- Basic hygiene and HIV/AIDS awareness;
- Road safety;
- Basic management of the environment;
- Tourism awareness and opportunities;
- Managing personal finance;
- Adult Basic Education and Training (ABET);

- Community based training programmes (e.g. knitting, computer skills, plant/machine operator, etc.)
- On-site training skills.

All generic skills training shall be accredited by the relevant Sector Education and Training Authority (SETA) and shall be provided with accredited entities and/or individuals.

b. Community Training

Community training shall be taught where the need has been identified.

Community training needs shall be identified by the PSC, who shall submit their proposal to the PMT for consideration and inclusion in to the Contract. While the PMT shall consider the training needs of the Community, the PMT shall inform the PSC of the training limitations, as well as of the training that could be undertaken through the Contract. Candidates shall be identified through the Community structures. The selected candidates shall receive formal skills training in a programmed and progressive manner in compliance with subclause (d). Priority shall be given to training that will equip the Community with skills that will enhance their Employability.

c. **Training Facilities**

The Contractor shall be responsible for providing everything necessary to offer the various training workshops and modules including:

i. a suitable venue with sufficient furniture, lighting and power,

(ii) all necessary stationery consumables and study material,

(iii) transport for attendees.

Before commencing with any structured training, the Contractor shall submit his intended programme to the PMT for approval of its subject content and proposed trainers, and the Contractor shall, if so instructed by the PMT, alter or amend the programme and/or course content.

D1011 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, wherethe specified work allows for a choice between mechanical or labour-enhanced means, theformer should generally be kept to the practical minimum.

Before commencing with any labour enhanced operations the Contractor shall discuss his intentions with the Engineer, and shall submit to the Engineer on a monthly basis, daily labour

returns indicating the numbers of temporary personnel Employed on the Works and the activities on which they were engaged.

Note:

Activities that are conventionally done by labour methods, e.g. gabions, shall not qualify under this section.

D1012 COMMUNITY DEVELOPMENT

a) Corporate Social Investment (CSI)

The Contractor shall demonstrate its willingness to actively participate in the social development initiatives for local Communities affected by the Contract. To this end, the Contractor shall provide details of CSI initiatives it will actively pursue under FormD9: Corporate Social Investment. The Employer will evaluate the CSI initiatives as part of the tender evaluation under "*other objective criteria*" of the Preferential Procurement Policy Framework Act, 2000.

b) Community Development Projects

The Employer will identify Community Development Projects to the benefit of the local Communities. These projects shall be undertaken primarily by Targeted Labour and Targeted Enterprises from within these Communities, under supervision of the Contractor.

Although executed as a component of the main contract, the Employer shall registera separate project number for such Community Development Projects and the Contractor shall submit a separate invoice for the Community Development Project.

Community Development Projects shall not add towards the Contractor's CPG and shall be additional efforts towards the Employer's transformation and socio- economic development goals.

C4 SITE INFORMATION

C5 ANNEXURES