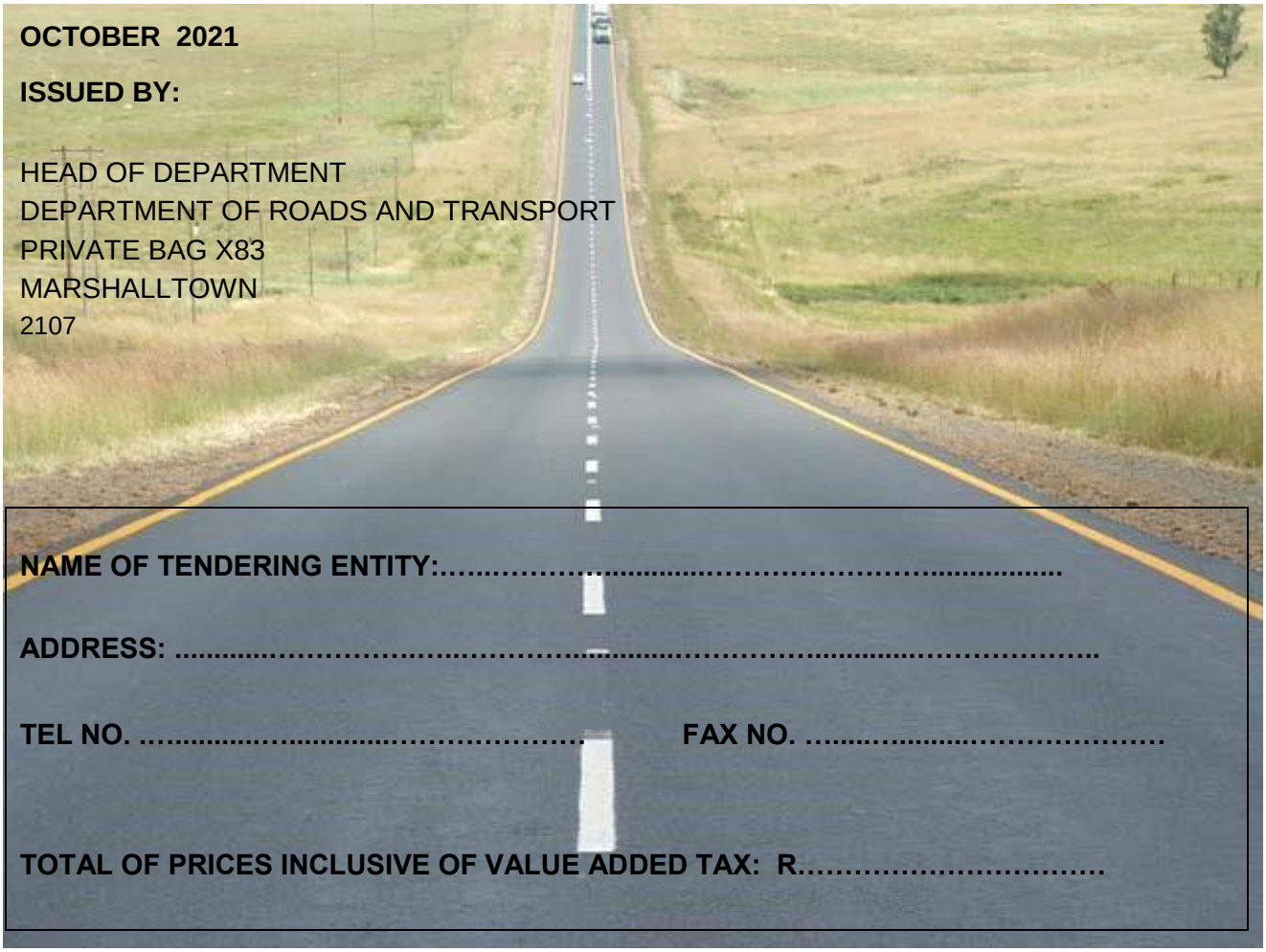
GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF ROADS AND TRANSPORT

TENDER NUMBER: DRT 31E2/09/2019

EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: Package E - Contract E2

PROCUREMENT DOCUMENT



OCTOBER 2021

ISSUED BY:

HEAD OF DEPARTMENT
DEPARTMENT OF ROADS AND TRANSPORT
PRIVATE BAG X83
MARSHALLTOWN
2107

NAME OF TENDERING ENTITY:…….

ADDRESS: ……

TEL NO. …… **FAX NO. ……**

TOTAL OF PRICES INCLUSIVE OF VALUE ADDED TAX: R……

GAUTENG PROVINCE
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TENDER NUMBER: DRT 32 E2/03/2016 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

LIST OF CONTRACT DOCUMENTS

The following documents form part of this contract:

Volume 1: The FIDIC Conditions of Contract for construction for building and engineering works designed by the Employer (1999), issued by the International Federation of Consulting Engineers, which the tenderer shall purchase himself.

Volume 2: The COLTO Standard Specifications for Road and Bridge Works for State Road Authorities (1998 edition), issued by the Committee of Land Transport Officials which the tenderer shall purchase himself.

Volume 3: The Project Document, containing the tender notice, Conditions of Tender, Tender Data, Returnable Schedules, General and Particular Conditions of Contract, Project Specifications, Bill of Quantities, Form of Offer and Site Information is issued by the Employer. The Employer's Form of Acceptance and any correspondence from the selected tenderer, performance security-demand guarantee and all addenda issued during the period of tender will also form part of this volume once a successful tenderer has been appointed.

Volume 4: The road works drawings.

Volume 5: Other applicable documents:

a) Standard Specification for Routine Road Maintenance, Volume 2 (October 2001), issued by The South African National Roads Agency SOC Limited (SANRAL).
b) Routine Road Maintenance Guidance Manual, 2nd edition, issued by The South African National Roads Agency SOC Limited (SANRAL).
c) Maintenance Quality Standards, issued by Gauteng Provincial Department of Roads and Transport.
d) Typical Plans for Road design, issued by Gauteng Provincial Department of Roads and Transport.

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		Colour
THE TENDER		
PART T1 : TENDERING PROCEDURES		
T1.1	TENDER NOTICE AND INVITATION TO TENDER	White
T1.2	TENDER DATA	Pink
PART T2 : RETURNABLE DOCUMENTS		
T2.1	LIST OF RETURNABLE DOCUMENTS	Yellow
T2.2	RETURNABLE SCHEDULES	Yellow
THE CONTRACT		
PART C1 : AGREEMENTS AND CONTRACT DATA		
C1.1	FORM OF OFFER AND ACCEPTANCE	White
C1.2	CONTRACT DATA	White
C1.3	OTHER CONTRACT FORMS	White
PART C2 : PRICING DATA		
C2.1	PRICING INSTRUCTIONS	Yellow
C2.2	BILL OF QUANTITIES	Yellow
PART C3 : SCOPE OF WORK		Blue
C3.1	SCOPE OF WORK	
PART C4 : SITE INFORMATION		
C4.1	SITE INFORMATION	Green
PART C5 : ANNEXURES		White

PART T1: TENDERING PROCEDURES

TENDER NUMBER: DRT 32 E2/03/2016 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

Part T1.1 Tender Notice and Invitation to Tender

The Department of Roads and Transport of the Gauteng Provincial Government invites tenders for **THE EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2**

The following documents must be submitted:

- Tax Clearance Status Pin
- Proof of current registration with CIDB with a **6 CE grading** or higher.
- Company registration documents

Hard copy tender documents will not be on sale due to COVID 19 restrictions. Prospective tenderers can download and print their own version of the tender document by accessing the eTender Publication Portal website (www.etenders.gov.za) or www.gauteng.gov.za > Media > Publications > Tenders (Advertised/Closed Lists/Awarded etc). Where tender documents are accessed and downloaded via internet no payment to Department is required.

Tender documents will be available for download from **1st October 2021.** Tenderers are advised to ensure that all tender documents are properly bound upon submission on the closing date and time. Queries related to issuing of this document may be addressed to Supply Chain Management (SCM) on drt.scmbidadmin@gauteng.gov.za.

The prospective tenderer shall be represented by a suitably qualified and experienced individual who can fully comprehend the implications of the work involved. A compulsory Clarification Meeting with representatives of the Department will take place on **12 October 2021 starting at 10H00**. **Venue:** 1215 Nico Smith Street, Koedoespoort, Pretoria. The closing time for receipt of tenders is 11H00 on **4 November 2021**.

THE DEPARTMENT WILL NOT ACCEPT TENDERS SUBMITTED BY MEANS OF Telegraph, telephones, telex, facsimile, or and other digital or electronic media. Tenders submitted after the closing date and time will not be accepted.

The Department reserves the right to cancel **OR** not to award this tender to any party.

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Part T1.2 Tender Data

The conditions of tender are the Standard Conditions of Tender as contained in SANS 10845-3 (2015) and Annexure F Standard Condition of Tender, as amended by the CIDB Standard for Uniformity in Construction (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 2015.

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	Tender Data
F.1.1	The employer is the **Department of Roads and Transport, Chief Directorate Roads Maintenance of the Gauteng Provincial Government, Private Bag X83, Marshalltown.**
F.1.2	The Tender Documents issued by the employer comprise the following documents: **THE TENDER** **Part T1: Tendering procedures** T1.1 - Tender notice and invitation to tender T1.2 - 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 C1.3 - Other Contract Forms **Part C2: Pricing data** C2.1 - Pricing instructions C2.2 - Bill of Quantities **Part C3: Scope of work** C3 - Scope of work **Part C4: Site information** C4 - Site information **Part C5 : Annexures**
F.2.1	Only those tenderers who are registered with the CIDB at the closing date for submission of tenders, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a **6CE** class of construction work are eligible to have their tenders evaluated. For this contract the eligibility criteria are as follows: i. Regulation 25 (1B): the value of the contract for the purpose of Regulation 25 (1) shall be taken as the annual value, namely one third of the tender sum; and ii. Regulation 25 (7A): the maximum value of contract which the employer considers reasonable is listed in the table below, subject to satisfactory proof of a tenderer's ability to perform the work specified at the tendered value. However, in the event that one third of the sum tendered exceeds the maximum value of contract shown then such tender shall be deemed unresponsive.

Designation	CIDB maximum value of contract per Regulation 17	Employer's maximum value of contract per Regulation 25 (7A)
3	R 3 000 000	R 3 600 000
4	R 6 000 000	R 7 200 000
5	R 10 000 000	R 12 000 000
6	R 20 000 000	R 24 000 000
7	R 60 000 000	R 72 000 000
8	R 200 000 000	R 240 000 000

	Joint Ventures are eligible to submit tenders provided that: 1. every member of the joint venture is registered with the CIDB at the closing date for tender; 2. the lead partner has a contractor grading designation in the 5CE class of construction work; and 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for **a 6 CE** class of construction work or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations

F.2.7	The arrangements for a **compulsory clarification meeting** are: Venue: 1215 Nico Smith Street, Cafeteria Koedoespoort , Pretoria Date: **12 October 2021** starting at 10H00 **Tenderers should note that only competent persons are to attend the clarification meeting.**
F.2.13.1	Tenderers are to submit one tender only, either as a single tendering entity or as a member of a Joint Venture.
F2.13.3	Each tender offer communicated on paper shall be submitted only as one original.
F.2.13.4	Submit only the signed original tender
F.2.13.5 F.2.15.1	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are: **Location of tender box:** Foyer of Life Centre Building, Ground Floor **Physical address:** 45 Commissioner Street, Johannesburg. **Identification details: TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2 and the closing date and time of the tender.**
F2.13.6	A two-envelope procedure will not be followed.
F.2.15	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. THE DEPARTMENT WILL NOT ACCEPT TENDERS SUBMITTED BY MEANS OF Telegraph, telephones, telex, facsimile, or and other digital or electronic media. Tenders submitted after the closing date and time will not be accepted
F.2.16	The tender offer validity period is 90 days.
F.2.20	The tenderer is required to submit with their tender a letter of intent from an approved insurer undertaking to provide the Form of Guarantee to the format included in Part T2.2 of this procurement document.
F.2.23	The tenderer is required to submit with their tender the following documents: • Original tax clearance certificate • Joint Venture Agreement and Power of Attorney (if applicable) • Joint Venture /Trust / Consortia to submit consolidated Broad Based Black Economic Empowerment certificate • VAT registration certificate • Workmen's Compensation registration certificate (or proof of payment of contribution in terms of the COID Act no. 130 of 1993) • Company /Closed Corporation / Trust / Partnership registration certificate • Certified copy of identity document in the case of one-man concerns • Project completion certificates
F.3.4	Tenders will be opened immediately after the closing time for tenders at 11H00 on 4 November 2021 .

F.3.11

The procedure for the evaluation of responsive tenders is Method 2

The financial offer will be scored using Formula 2 (option 1) where the value of W_1 is:

1 90 where the financial value inclusive of VAT of all responsive tenders received have a Rand value above R50 000 000 or

2 80 where the financial value inclusive of VAT of one or more responsive tender offers have a Rand value that equals to or above R 30 000 and up to R50 000 000

Tender evaluation points will be awarded to tenderers who submit responsive tenders and who are found to be eligible for the preference claimed. Preference Points are based on a tenderer's scorecard measured in terms of the Broad-Based Black Economic Empowerment Act (B-BBEE, Act 53 of 2003) and the Preferential Procurement Regulations (2017) to the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000).

Financial offers from Tenderers meeting the minimum threshold for functionality will be evaluated.

The Employer adheres to all relevant Acts, including the Black Economic Empowerment Act no. 53 of 2003, Preferential Procurement Policy Framework Act no. 5 of 2000, and Employment Equity Act no. 55 of 1998

A bidder who scores the highest on points for price and preference will not be awarded more than two (2) bills of quantity (contracts). The two (2) bills awarded will be the bills with the highest rand value in which the bidder was ranked first. The remaining bills will be awarded (maximum of two (2) per bidder) in terms of the bidder's ranking on points. The rand value of the bills awarded to all subsequent bidders, will be based on the same principle applied to the bidder that was ranked first

In terms of Preferential Procurement Regulations of 2017, the 80/20 preference point system is applicable. Broad-Based Black Economic Empowerment (B-BBEE) requires that bidders submit original and valid B-BBEE Status-Level Verification Certificates or certified copies thereof to substantiate their B-BBEE rating claims. Failure to submit such a certificate will result in the bidder being disqualified. The bidders must submit verification certificates that are accredited by:

- SANAS (South African National Accreditation System)

B-BBEE Status Level of Contributor	**Number of Points (80/20 System)**
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant Contributor	0

A Trust, Consortium or Joint Venture must obtain and submit a consolidated B-BBEE Status Level Verification Certificate with their bids.

Clause number	Tender Data			
F.3.11.3	The functionality criteria in respect of each of the criteria are as follows:			
	Key personnel **(Max 30 points)** **Bidders MUST complete the Experience of Key Staff schedule attached in the tender document for key personnel and MUST clearly indicate routine road maintenance or road rehabilitation and/or road construction experience, project description, duration and contactable references. NB: (Failure to complete and submit certified qualifications will result in the bidder getting zero points)**	**Relevant Company experience in Routine Road Maintenance or Road Rehabilitation & Construction.** **(Max 40 points)** **(Failure to submit required completion certificates will result in the bidder getting zero points)** **NB: Completion certificates must be signed by all relevant parties (Certificate that is not signed by all relevant parties will result in the bidder forfeiting points)** **NB: Practical completion certificate will not be accepted.**	**Project Plan & Quality Control Plan** **(Max 10 points)** **(Failure to submit relevant documents will result in the bidder getting zero points))**	**Bank Rating** **(Max 20 points) (Failure to submit proof of bank rating from the relevant bank will result in the bidder getting zero points) and** **NB: the date of bank stamp must be less than 12 months from the date of the bid closure.**
	Senior Site Agent assigned on a permanent basis with a degree / diploma qualification in the Civil Engineering or Built Environment, with required experience in routine road maintenance, road rehabilitation & road construction. **(Max 20 points)** **Experience:** • 10 years or more experience **(20 points)** • 5 years to less than 10 years' experience **(10 points)** • Less than 5 years' experience **(0 points)** **General Foreman** assigned on a permanent basis required experience in routine road maintenance , road rehabilitation & road construction **(Max 5 Points)** **Experience:** • 10 years or more experience **(5 points)**	Completed routine road maintenance or road rehabilitation & road construction projects with contactable references within the past five (5) years: **(Max 40 points)** • 3 or more projects completed: **(40 points)** • 2 projects completed: **(30 points)** • 1 project completed: **(20 points)** • 0 project completed: **(0 points)** **(Completion Certificate shall also mean Taking -Over Certificate and Certificate of Completion – which must be signed by all relevant parties)**	**Project Plan**: Contractor`s clear unambiguous construction programme **(Max 5 points)** **Quality Control Plan:** Contractor's quality plan and procedures summary in point note form, which will ensure compliance with the employers requirements **(Max 5 points)**	Rating A and B: **(20 points)** Rating C: **(10 points)** Rating D, E and F: **(0 points**

	• 5 years to less than 10 years' experience **(3 points)** • have less than 5 years' experience **(0 points)** **Safety Officer** assigned on a permanent basis & must be registered and in good standing with SACPCMP as a construction health and safety officer (CHSO) with experience in routine road maintenance or road rehabilitation and/or road construction: **(Max 5 Points).** **Experience:** • 5 years or more experience **(5 points)** • 1 year to less than 5 years' experience **(2 points)** • Less than 1 year experience **(0 points)**			
	NB: FUNCTIONALITY WILL BE SCORED OUT OF 100 POINTS, BIDDERS WHO FAIL TO MEET THE MINIMUM THRESHOLD OF 60 POINTS WILL NOT BE CONSIDERED FOR FURTHER EVALUATION Bidders who qualify for Functionality will be evaluated further for Price and Preference only.			
F.3.13.1	Tender offers will only be accepted if: a) the tenderer submits **an original valid** Tax Clearance Certificate in the name of the tendering entity as issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations; b) the tenderer submits a letter of intent from an approved insurer undertaking to provide the Form of Guarantee to the format included in Part T2.2 of this procurement document c) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation. d) the tenderer or any of its directors/shareholders 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; e) 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; and f) 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 and persons in the employ of the state are permitted to submit tenders or participate in the contract			

	g) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; h) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.

PART T2: RETURNABLE SCHEDULES

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

Part T2.1 List of Returnable Documents

1 Returnable Schedules required for tender evaluation purposes

The tenderer must complete the following returnable schedules as relevant:

- Compulsory Enterprise Questionnaire
- Record of Addenda to Tender Documents
- Certificate of Authority
- Schedule of Proposed Subcontractors
- Schedule of recently completed and current contracts
- Schedule of plant and equipment
- Occupational Health and Safety Act: Statement by Tendering Entity
- Experience of Key Staff
- Quality management questionnaire
- Tenderer's Bank Details
- Tenderer's Litigation History
- Schedule of Special Materials

2 Other documents required for tender evaluation purposes

The tenderer must complete the following returnable documents:

- Certificate of attendance at clarification meeting
- Tax Clearance Status Pin for Tenders
- Form of Intent to Provide a Form of Guarantee
- Registration with Construction Industry Development Board
- Certificate of Insurance Cover
- SBD 4: Declaration of Interest
- SBD 8: Declaration of Bidder's Past Supply Chain Management Practices
- SBD 9: Certificate of Independent Bid Termination

3 Returnable Schedules that will be used for tender evaluation purposes and be incorporated into the contract

- B-BBEE Verification Certificate
- SBD 6.1: Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2017

4 C1.1 Offer portion of Form of Offer

5 C1.2 Contract Data

6 C2.2 Bill of quantities

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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, if any: . . . . . .

Section 3: CIDB registration number, if any: . . . . . .

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: The attached SDB 4 must be completed for each tender and be attached as a tender requirement

Section 7: The attached SDB 6 must be completed for each tender and be attached as a requirement

Section 8: The attached SDB 8 must be completed for each tender and be attached as a requirement

Section 9: The attached SDB 9 must be completed for each tender and be attached as a requirement

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

i) authorizes the Employer to obtain a tax clearance status pin from the South African Revenue Services that my / our tax matters are in order;

ii) 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;

iii) 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;

iv) 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; and

v) 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 _____

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Record of Addenda to tender documents

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	Date	**Title or Details**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

Attach additional pages if more space is required.

Signed _____ _____

_____ Date _____

Name Position

Enterprise name _____

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Certificate of Authority

This Returnable Schedule is to be completed by the tendering entity.

I/We, the undersigned, are submitting this tender offer and hereby authorise Mr/Ms . . . . . authorised signatory of the company, ... acting in the capacity of, ... , to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
CIDB registration number: …… ….		Signature. ..... Name ..... Designation
CIDB registration number: …… ….		Signature ..... Name..... Designation
CIDB registration number: …… ….		Signature ..... Name ..... Designation

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Schedule of Proposed Subcontractors

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

If we are awarded a contract we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments.

	Name and address of proposed Subcontractor	Description of Work to be executed by Subcontractor	Previous experience with Subcontractor

Attach additional pages if more space is required

Signed _____ Date _____

Name _____ Position _____

Enterprise name _____

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Schedule of recently completed and current contracts

List all contracts completed in the last five (5) years

Contract title:		Employer (name) Place (town)	Reference person		Contract Amount (R million)	Contract Period (months)	Date of Completion*
			Name	Tel			
1							
2							
3							
4							
5							
6							
7							

*Completed means that a certificate has been issued in terms of a contract by the employer, signifying that the whole of the construction works have reached a state of readiness for occupation or use for the purposes intended, although some minor work may be outstanding.

List all current contracts not complete at the time

Project:		Employer (name) Place (town)	Reference person		Contract Amount (R million)	Contract Period (months)	Date of commencement	Date of expected Completion*
			Name	Tel				
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

*Date when defects liability period commenced

Signed _____ Date _____

Name _____ Position _____

Enterprise name _____

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Schedule of Plant and Equipment

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

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

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

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

Quantity (hired)	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed ---------- Date ----------

Name ---------- Position ----------

Tenderer ----------

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Occupational Health and Safety Act: Statement by Tendering Entity

I, ... duly authorised

to represent ..... (company name)

in my capacity as .....

promulgated from time to time,

whilst performing work on .....

I confirm that all employees who perform work on the site shall be properly trained to do this in a manner which is safe and without risk to health and safety to themselves and others in the vicinity and undertake to have our activities adequately supervised in the interest of health and safety.

Signed ---------- Date ----------

Name ---------- Position ----------

Tenderer

Experience of Key Staff

Bidders shall complete Schedule of Key Staff below and attach certified copies of qualification & registration accordingly for:-

Senior Site Agent

Safety officer

General foreman

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed ---------- Date ----------

Name ---------- Position ----------

Tenderer

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Schedule of Key Staff

Senior Site Agent

NAME	DATE OF BIRTH	POSITION IN TEAM	QUALIFICATION

Note1:

- List only the projects completed in the last 10 years or more that the tenderer considers relevant to the specified scope of works.

Technical Experience

CLIENT & PROJECT NO.	PROJECT TYPE	RELEVANT EXPERIENCE STARTED	RELEVANT EXPERIENCE ENDED	VALUE	POSITION HELD	CONTACT PERSON AND POSITION	CONTACT NO.

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Safety Officer

NAME	DATE OF BIRTH	POSITION IN TEAM	QUALIFICATION & REGISTRATION

Note1:

- List only the projects completed in the last 5 years or more that the tenderer considers relevant to the specified scope of works.

Technical Experience

CLIENT & PROJECT NO.	PROJECT TYPE	RELEVANT EXPERIENCE STARTED	RELEVANT EXPERIENCE ENDED	VALUE	POSITION HELD	CONTACT PERSON AND POSITION	CONTACT NO.

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General Foreman

NAME	DATE OF BIRTH	POSITION IN TEAM	QUALIFICATION

Note1:

- List only the projects completed in the last 10 years or more that the tenderer considers relevant to the specified scope of works.

Technical Experience

CLIENT & PROJECT NO.	PROJECT TYPE	RELEVANT EXPERIENCE STARTED	RELEVANT EXPERIENCE ENDED	VALUE	POSITION HELD	CONTACT PERSON AND POSITION	CONTACT NO.

Quality Management Questionnaire

1. Does the Tenderer have a quality management system which is certified in terms of ISO 9001: 2000

YES	NO

2. If “yes”, tenderer to supply brief summary of structure of system.

3. If “no”, does the tenderer intend to apply for certification and by when?

YES	NO

DATE

If the tenderer does not intend to apply for certification he must submit details of the quality management system presently in place.

Signed ---------- Date _____

Name ---------- Position _____

Tenderer

Tenderer's Bank Details

Notes to tenderer:

1. **The tenderer must attach to this form a letter from the bank in which the entity declares how it conducts their account. The contents of the bank's letter must state the credit rating that it, in addition to the information required below, accords to the tenderer for the business envisaged by this tender. Failure to provide the required letter with the tender submission may render the tenderer's offer unresponsive in terms of tender condition F.3.8.**
2. **The tenderer's banking details as they appear below shall be completed.**
3. **In the event that the tenderer is a joint venture enterprise, details of all the members of the joint venture shall be similarly provided and attached to this form.**

The tenderer shall provide the following:

i) Name of Account Holder: .....

ii) Account Number: .....

iii) Bank name: .....

iv) Branch Number: .....

v) Bank and branch contact details .....

.....

SIGNED BY TENDERER: .....

Tenderer's Litigation History

Note to tenderer:

The tenderer must list below details of any litigation with which the tenderer (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favour the award, if any, was made.

Employer	Other litigating party	Dispute	Award value	Date resolved

SIGNED BY TENDERER: .....

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Schedule of Special Materials

Notes to tenderer:

1. **Refer to Particular Condition of Contract amending subclause 13.8 of the General Conditions of Contract.**
2. **Only net bitumen content of asphalt and bituminous products shall be subject to rise and fall and no account shall be taken of transport, emulsifiers, diluents or modifiers that may be supplied ex refinery or added later.**
3. **For the purpose of clarity when using this form, a supplier is any company (including refineries) that supplies to a tenderer a bituminous product that it manufactures using bitumen as the sole or blended ingredient in the product. A tenderer shall, in compliance with note 4 below, attach to this form a letter of supply from each supplier it intends using in the performance of the contract.**
4. **Tenderers shall append to this page the following information on a letterhead from their selected supplier:**
   - **the supplier's company registration and address details; and**
   - **the product range available including refinery from which the base bitumen is drawn; and**
   - **the net base bitumen type and content for each product; and**
   - **the supply price (excluding VAT but including all other obligatory taxes and levies) to the tenderer for the net bitumen base content of each product; and**
   - **the date from which the supply prices apply.**
5. **Rise and fall adjustments shall only be made upon receipt by the engineer of the appropriate letters of supply in compliance to note 4 above, but with the changed supply prices and date of application, as well as reasons for the changes.**
6. **A change of supplier may be permitted, but only upon application to the engineer with the appropriate letters of supply in compliance to Note 4 above and approval thereof.**
7. **Non-disclosure of reduction in supply prices shall be deemed a contractor's deliberate action to defraud the Employer and grounds for the Employer, at its sole discretion, to terminate the contract.**

Each material dealt with as a special material in terms of clause 4 of the Contract Price Adjustment Schedule of the Appendix to the Particular Conditions of Contract as amended by the Particular Conditions is stated in the list below. The rates and prices for the special materials shall be furnished by the tenderer as an attachment to this Form, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies.

SPECIAL MATERIAL	UNIT*	NAME OF SUPPLIER AND RATE OR PRICE FOR THE BASE MONTH
Bitumen (Net bitumen content) Bitumen 35/50 Bitumen 50/70 Bitumen 70/100 MC 10 MC 30 MC 3000	Ton	As stated on supplier's letter attached to this form.

*Indicate whether the material will be delivered in bulk or in containers.

SIGNED ON BEHALF OF THE TENDERER: .....

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Certificate of attendance at clarification meeting

This is to certify that ..…..... (Enterprise name)

of ..……...……...……

(address)……...……...

was represented by the person(s) named below

I have made myself familiar with all site conditions likely to influence the work and all aspects that could influence either the cost or the construction of the service.

I further certify that I am satisfied with the description of the work and explanations given at the meeting and that I understand perfectly the work to be done, as specified and implied, in the execution of this contract.

Particulars of person(s) attending the meeting

Name …….. Signature ……

Capacity ……..

Name …….. Signature ……..

Capacity ……..

Attendance of the above person(s) at the meeting is confirmed by the Project Manager, namely

Name…….. Signature ……

Capacity …….. Date & Time ……...

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Tax Clearance Status Pin for Tenders

The tenderer is to affix to this page:

A valid Tax Clearance Status Pin for Tenders issued by the South African Revenue Services (S.A.R.S.) in the Name of the Tendering Entity indicating the Trading Name.

Note:

Failure to affix such certificate may result in this tender not being considered for the award of the contract

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Form of Intent to Provide a Form of Guarantee

1 With reference to the tender of ……. …… (hereinafter referred to as the "**TENDERER**" for the project ……..…….. (hereinafter referred to as the "**CONTRACT**" for the DEPARTMENT OF ROADS AND TRANSPORT of the Gauteng Provincial Government, (hereinafter referred to as the "**EMPLOYER**" for the tender dated ……..……..…….. for the offered total of prices of (R…..…..…..…..……) ……..…… (in words)

2 I/We ……..……..…… in my/our capacity as …… and hereby representing ……. ……. (hereinafter referred to as the "**GUARANTOR**" advise that the "**GUARANTOR**" undertakes to provide a **Form of Guarantee** to the **EMPLOYER** to the Employer's format included in Part C1.3 of this document within five (5) working days of the written acceptance of the contractor's tender offer.

Thus done and signed at …… on ……..……..

…… ……
Name of signatory *Capacity of authorised signatory*

……. ……
As witness *for and on behalf of the **Guarantor** who by signature hereof warrants authorisation hereto*

Registration with Construction Industry Development Board

The tenderer is to affix to this page:

Written proof of his registration with the CIDB as a Category **6 CE** grading or higher.

Note:

1. Failure to affix such documentation as prescribed to this page shall result in this tender not being further considered for the award of the contract.

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Certificate of Insurance Cover

Note to tenderer:

In the event of the tenderer being a joint venture/consortium the details of the individual members must also be provided.

The tenderer shall provide the following details of this insurance cover:

i) Name of Tenderer: .....

ii) Period of Validity: .....

iii) Value of Insurance:

- Insurance for Works and Contractor's Equipment

  Company: .....

  Value: .....

- Insurance for Contractor's Personnel

  Company: .....

  Value: .....

- General public liability

  Company: .....

  Value: .....

- SASRIA

  Company: .....

  Value: .....

SIGNED BY TENDERER: .....

SBD 4
Declaration of Interest

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

   - the bidder is employed by the state; and/or

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

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

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

   2.2 Identity Number: .....

   2.3 Position occupied in the Company (director, trustee, shareholder[2], member): .....
   .....

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

   2.5 Tax Reference Number: .....

   2.6 VAT Registration Number: . .....

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

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

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

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

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member: .....
Name of state institution at which you or the person connected to the bidder is employed : .....
Position occupied in the state institution: .....
Any other particulars:
……
……
……

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

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

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

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

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

2.8.1 If so, furnish particulars:
……..
……..
……...

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

2.9.1 If so, furnish particulars.
……...
……..…
……

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

2.10.1 If so, furnish particulars**.**

……

……

……

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract? **YES/NO**

2.11.1 If so, furnish particulars:

……..

……..

……..

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

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

4 DECLARATION

I, THE UNDERSIGNED (NAME)……

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT.
I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

…….. ..……

Signature Date

…….. ……

Position Name of bidder

November 2011

SBD 8

Declaration of Bidder's past supply chain management practices

1 This Standard Bidding Document must form part of all bids invited.

2 It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

3 The bid of any bidder may be disregarded if that bidder, or any of its directors have-

a. abused the institution's supply chain management system;
b. committed fraud or any other improper conduct in relation to such system; or
c. failed to perform on any previous contract.

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

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? **(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the *audi alteram partem* rule was applied).** The Database of Restricted Suppliers now resides on the National Treasury's website(**www.treasury.gov.za**) and can be accessed by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? **The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.**	Yes ☐	No ☐

4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
4.4.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) .....
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

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

……... **……..**
Signature **Date**

…….. **……..**
Position **Name of Bidder**

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SBD 9

Certificate of Independent Bid Determination

1 This Standard Bidding Document (SBD) must form part of all bids[1] invited.

2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).[2] Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.

3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:

a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.

b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.

4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

[1] Includes price quotations, advertised competitive bids, limited bids and proposals.

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

I, the undersigned, in submitting the accompanying bid:

_____ (Bid

Number and Description)

in response to the invitation for the bid made by:

_____ (Name

of Institution)

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

I certify, on behalf of:_____that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:

    (a) has been requested to submit a bid in response to this bid invitation;
    (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
    (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium[3] will not be construed as collusive bidding.

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

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding: (a) prices;
   (b) geographical area where product or service will be rendered (market allocation)
   (c) methods, factors or formulas used to calculate prices;
   (d) the intention or decision to submit or not to submit, a bid;
   (e) the submission of a bid which does not meet the specifications and conditions of the bid; or (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

…… ……

Signature Date

…… ……

Position Name of Bidder

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Tenderer's B-BBEE Verification Certificate

Notes to tenderer:

1. **The tenderer shall attach to this form a B-BBEE verification certificate in accordance with the Construction Sector Codes of Practice promulgated in Gazette 41287 on 1 December 2017.**

2. **In the event of a joint venture (JV), a consolidated B-BBEE verification certificate in the name of the JV shall be attached.**

3. **The attached verification certificate and the associated assessment report shall identify:**

   (a) The name and domicilium citandi et executandi of the tenderer.
   (b) The registration and VAT number of the tenderer.
   (c) The dates of granting of the B-BBEE score and the period of validity.
   (d) The expiry date of the verification certificate.
   (e) A unique identification number.
   (f) The standard and/or normative document, including the issue and/or revision used to evaluate the tenderer.
   (g) The name and/or mark/logo of the B-BBEE verification agency.
   (h) The category (Generic, QSE, Exempt) in which the tenderer has been measured.
   (i) The B-BBEE status level.
   (j) The South African National Accreditation System (SANAS) logo on the verification certificate once verification agencies have been accredited.
   (k) The B-BBEE procurement recognition level.
   (l) The score achieved per B-BBEE element.
   (m) The % black shareholding.
   (n) The % black women shareholding.
   (o) The % black persons with disabilities
   (p) The value added status of the tenderer.

   The Employer will not be responsible to acquire data that is needed for its own reporting systems and which may not form part of a verification agency's standard certificate format. The tenderer, at its own cost, must acquire any missing specified data listed in 3 above from its selected verification agency or registered auditor and have it recorded on the certificate. Alternatively, such missing data must be supplied separately, but certified as correct by the same verification agency or registered auditor and also attached to this form. Failure to abide by this requirement will result in such tenderer scoring zero preference point.

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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.

---

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 be less than R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
b) 80/20 preference point system will be applicable to 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	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
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;
(c) **"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 competitive bidding processes or proposals;
(d) **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
(e) "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;
(f) **"functionality"** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
(g) **"prices"** includes all applicable taxes less all unconditional discounts;
(h) **"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;
(i) **"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;

(j) **"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

(N.B: In completing this section of this form, the Bidders MUST note that a minimum of 30% will be subcontracted to local subcontractors. The minimum 30% subcontracting will be evaluated as part of the prequalification criteria as contained in the Tender Notice.)

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

7.1.1 Indicate:

i) What percentage of the contract will be subcontracted? Minimum of 30% will be subcontracted, and same 30% will be evaluated during mandatory prequalification

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	

i) 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 authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing 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 favourable arrangements due to such cancellation;
(d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
(e) forward the matter for criminal prosecution.

WITNESSES:

1. ……

2. ……

SIGNATURE(S) OF BIDDER(S)

DATE: …… ADDRESS: ……..……..

……..……..……..

……..……..……..……..

PART C1: AGREEMENTS & CONTRACT DATA

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

Part C1 Agreements and Contract Data

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C1.1 FORMS OF OFFER AND ACCEPTANCE

C1.1.1 FORM OF OFFER

Head of Department
Department Of Roads and Transport
Private Bag X83
Marshalltown 2107

Sir,

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

I/we, by signing this part of the forms of offer and acceptance, confirm that I/we practise the principles of corporate governance that abhors corruption and fraud and that I/we have examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules and am/are duly authorised to represent and commit the tenderer to the contractual obligations contained therein.

I/we further confirm that by submitting this offer the tenderer accepts the conditions of tender and 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 tender and the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICES (INCLUSIVE OF VALUE ADDED TAX) IS;

..... (in words)

(R ..... in figures)

You may accept this offer by signing and returning to the tenderer one copy of the Form of acceptance before the end of the period of validity stated in the tender data, (or at the end of any agreed extension thereof), whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

Notwithstanding anything contained in a covering letter to this tender, I/we declare this offer is submitted entirely without variations or deviations other than those stipulated in the form for Proposed Amendments and Qualifications by the tenderer and that it is made free from any fraud, corruption and misrepresentation.

Yours faithfully

SIGNATURE: ..... DATE: .....

NAME(INCAPITALS): .....

CAPACITY: .....

Date and minute reference of Board resolution if different from returnable document: Certificate of Authority

Certificate of Authority for signature .....

NAME AND ADDRESS OF ORGANISATION: .....

.....

NAME AND SIGNATURE OF WITNESS: SIGNATURE: .....

DATE: .....NAME(INCAPITALS): .....

C1.1.2 FORM OF ACCEPTANCE

To_____

_____

_____ *(Name of successful tenderer)*

Dear Sir,

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

1. It is our pleasure to inform you that the Department of Roads and Transport (the Employer) accepts your *(select if applicable corrected/corrected alternative/alternative)* offer for the……Region in the amount of R…….. (i.e. including VAT).

2. The amount due may not be the accepted price but payment shall be made in accordance with the conditions of contract identified in the contract data.

3. Acceptance shall form an agreement between us according to the terms and conditions contained in this form and in the contract that is comprised of:

   Part C1: Agreements and Contract Data (including this form of acceptance),
   Part C2: Pricing Data,
   Part C3: Scope of the Work,
   Part C4: Site Information, and
   Part C5: Annexures

   together with issued drawings and other documents, or parts thereof, which may be incorporated by reference into the Parts listed above.

a) Deviations and/or variations included in your offer as well as any changes to the terms of the offer agreed by us during the process of offer and acceptance shall not be valid unless contained in the appended schedule of deviations. (*If no deviation state* "There are no deviations, variations or changes to the documents.) Addenda issued during the tender period are deemed not to be deviations to the tender documents and schedules.

b) Within 14 calendar days of the date of this form of acceptance (including the schedule of deviations if any) you shall deliver to the Employer:

   - Performance Security (per clause 4 of the FIDIC Conditions of Contract) a proforma of which is attached for your reference. The 10% calculation shall be based on the accepted contract value as contained in this form and there shall be no deviations from the wording of the proforma guarantee.
   - Proof of insurance in terms of the information provided in the contract data and clause 18 of the FIDIC Conditions of Contract. Proof of currency of insured cover shall be provided on a monthly basis until contract completion.
   - Proof that the contract has been registered by the Department of Labour in terms of Occupational Health and Safety legislation, for which purpose the relevant forms have already been partially completed by the Employer and attached hereto.
   - The completion of the attached Employer's Form of Banking Details.

   Failure to fulfil any of these obligations shall constitute a repudiation of this agreement.

4. The effective date of the contract shall be the date of this form of acceptance unless you, within seven (7) calendar days of the effective date, notify the Employer in writing of any justification why you cannot accept the contents of this agreement.
5. The commencement date of the contract shall be that on which the site hand-over meeting is held, which shall not be later than …… *(usually 28 calendar days after the date of this form, or earlier if circumstances demand and as agreed between tenderer/Employer)*.

6. Notwithstanding that a full, original-signed copy of the contract document containing all contract data and schedules (including that of accepted deviations) will be delivered to you, this form of acceptance constitutes the binding contract between us.

Signature ..... Date .....

Name .....

Capacity .....

for the Employer
Department of Roads and Transport
Chief Directorate Roads Maintenance

Name and.....signature of witness .....

Date .....

C1.1.3 APPENDIX TO FORM OF ACCEPTANCE

Schedule of deviations

1. The deviations listed below constitute agreed variations/amendments to the tender data and schedules negotiated between the tenderer and Employer based on information provided in Form A4: Schedule of Variations or deviations by tenderer or conditions imposed by the Employer in its acceptance of the offer.
2. In the event that an alternative offer is accepted in terms of F.2.12 of the Tender Data, it is a fundamental condition of acceptance that all responsibilities and concomitant liabilities arising from the alternative design pass from the Employer to the contractor.
3. Addenda issued during the tender period are deemed not to be variations to the tender.

1. .....

2.....

3.....

4 etc .....

(Note to compiler: In the event that an alternative offer has been accepted by the Employer, the various elements of the alternative offer must be listed in this appendix)

C1.2 CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

Note to tenderer:

1. **The Conditions of Contract for Construction (1999 edition) prepared by the International Federation of Consulting Engineers (FIDIC), as amended, shall apply to this contract. The amendments are those issued by FIDIC and reproduced hereafter, together with additional amendments (particular conditions of contract) as prescribed by The Department of Roads and Transport**

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PART A: GENERAL CONDITIONS - FIDIC AMENDMENTS

Up to Friday, 29 September 2019 the following amendments have been issued by FIDIC.

ERRATA to the First Edition, 1999

The following significant errata are corrected in this reprinting of the First Edition of the Construction Contract. Several minor typographical errors and layout irregularities have also been corrected.

GENERAL PROVISIONS

Foreword	In figure "Typical sequence of Payment Events envisaged in Clause 14", change "14.11 Contractor issues Final Statement ..." to "Contractor submits Final Statement ...".
Page 2	In the middle of the third line of Sub-Clause 1.1.2.9, delete "under".
Page 26	In the title of Sub-Clause 8.1, substitute "Works" for "Work".
Page 56	In the penultimate line, delete the parentheses "(" and ")".
Page 60	Sub-Clause 20.3, in the line following sub-paragraph (d), delete "Particular Conditions" and substitute "Appendix to Tender".
Page 68	In the third line of Clause 9, delete the two words "notice to".

GUIDANCE FOR THE PREPARATION OF PARTICULAR CONDITIONS

Page 14	Under Sub-Clause 14.9, delete "EXEMPTION" and substitute "RETENTION".
Annexes	Delete "© FIDIC".

PART B: PARTICULAR CONDITIONS OF CONTRACT

Note to tenderer:

The following amendments are the Department of Roads and Transport's standard particular conditions to the general conditions and shall apply to this contract.

The following additional amendments to the FIDIC Conditions of Contract 1999 apply to this contract:

CONDITIONS OF CONTRACT

PARTICULAR CONDITIONS AMENDING THE GENERAL CONDITIONS OF FIDIC

SUBJECT INDEX

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BE Subcontractors	4.1 & 4.4	Health & Safety	6.7
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PARTICULAR CONDITIONS AMENDING THE GENERAL CONDITIONS OF FIDIC

1.1 Definitions

1.1.1 The Contract

Replace 1.1.1.1 with:

" **"Contract"** means the Form of Offer and Acceptance, Contract Data, these Conditions, the Specifications, the Drawings, the Schedules, and the further documents (if any), which are listed in the Form of Offer and Acceptance, and further includes drawings and documents or parts thereof, which any of the aforesaid documents incorporate by reference."

Replace 1.1.1.2 with:

" **"Contract Agreement"** means the documents called Forms of Offer and Acceptance."

Replace 1.1.1.3 with:

" **"Letter of Acceptance"** means the Form of Acceptance."

Replace 1.1.1.4 with:

" **"Letter of Tender"** means the Form of Offer."

Replace 1.1.1.5 with:

" **"Specification"** means that document entitled Scope of Work, as included in the Contract, and any additions and modifications to the Scope of Work in accordance with the Contract. Such document specifies the Works."

Replace 1.1.1.7 with:

" **"Schedules"** means the document(s) completed by the Contractor and submitted with his tender offer, as included in the Contract. Such document(s) may include the Bill of Quantities, data, lists and schedules of rates and / or prices."

Replace 1.1.1.8 with:

" **"Tender"** means that section of the Form of Offer and Acceptance called 'Offer' and all other documents which the Contractor submitted as Returnable Documents, as included in the Contract."

Replace 1.1.1.9 with:

" **"Appendix to Tender"** means the completed section entitled Appendix to Tender included in this Contract Data."

1.1.1.10 - Add the following:

" "**Bill of Quantities**" shall also mean the Pricing Schedule as contained in section C2.2 of the contract document."

1.1.2 Parties and Persons

Add the following:

"1.1.2.11 "**BE**" means Black Enterprise as defined in part C3 Scope of Work.
1.1.2.12 "**SMME**" means Small, Medium and Micro Enterprise as defined in part C3 Scope of Work.
1.1.2.13 "**BP**" means Black People as defined in part C3 Scope of Work."

1.1.3 Dates, Tests, Periods and Completions

Replace 1.1.3.9 with:

"A "**day**" means a calendar day, except for any extension of time that is granted under sub-clause 8.4, [Extension of Time for Completion], in which case a day means a working day. A "Year" means 365 calendar days"

1.1.6 Other Definitions

1.1.6.5 "Laws"

In the 1st line, replace "(or state)" *with* "(or other spheres of government)" *and in the 2nd line, after "*other laws*", insert "*including the South African Common Law*".*

Add the following:

"1.1.6.10 "Supplementary Agreement" means an agreement between the Employer and the Contractor for executing work, supplemental to the original Contract, which was not contemplated in the original Contract and is also not required for the proper completion of the original Contract."

1.2 Interpretation

Replace the contents of (d) with:

"The expression "written", "in writing", "notify", "the giving of notice", "giving consent", "as instructed" or "at the request of" means that communication, either hand-written or printed by whatever means, including transmission by telefax or e-mail, and resulting in a permanent record. However, such notice, instruction, consent or request is not deemed to have been delivered by virtue of its appearance in the minutes of meetings."

1.5 Priority of Documents

Replace 1.5 with:

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

(a) the Form of Offer and Acceptance;

(b) the Appendix to Tender within the Contract Data;

(c) the Particular Conditions within the Contract Data;

(d) these General Conditions;

(e) the Schedules; and (f) the Scope of Work.

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

1.6 Contract Agreement

Replace the 1st two sentences with the following:

"The Parties shall enter into a Contract Agreement within 28 days from the date of issue of the Letter of Acceptance (unless they agree otherwise), but not before the Employer has received and approved the Contractor's Performance Security and has accepted the Contractor's insurance cover. The Contract Agreement shall be in the form prescribed in the tender documents."

1.7 Assignment

Change the title of this sub-clause to read "Assignment/Cession" and replace its contents with the following:

"Neither Party shall, without the written consent of the other, assign the contract or any part thereof or any obligation under the Contract or cede any right or benefit thereunder."

1.8 Care and Supply of Documents

In the 1st paragraph, 2nd line, change "two copies" *to* "one copy".

In the 2nd paragraph, 3rd line, change "six" *to* "two".

2.3 Employer's Personnel

In the 1st sentence delete "and the Employer's other contractors".

3.1 Engineer's Duties and Authority

After the 3rd paragraph insert the following:

"In addition to the actions stipulated in the General Conditions whereby the Engineer shall first obtain the approval of the Employer, the Employer's approval shall also be obtained before taking any action under Sub-Clauses 8.4, 11.9, 13.3 and 20.1 as amended in these Particular Conditions".

4.1 Contractor's General Obligations

Add the following sentence to the 1st paragraph:

"With regard to the Contractor's proposals submitted under the item of the Scope of Works entitled Targeted Procurement Procedure, if the Contractor fails to provide the employment or training to the extent proposed, the Employer may impose penalties as set out in the above-mentioned Scope of Works."

Add the following to the 2nd paragraph:

"Where necessary to maintain the rate of progress required by the programme, the Contractor shall assist an SMME/BE Subcontractor employed as a condition of contract in buying, bringing to Site and storing on Site all Materials, Plant and equipment to be supplied by, or required for work to be done by, the SMME/BE Subcontractor."

4.2 Performance Security

Replace the 2nd paragraph with:

"The Contractor shall deliver the Performance Security to the Employer within 14 days of the date of issue of the Letter of Acceptance. The Performance Security shall be issued by a bank or insurance company registered or licensed as a bank or insurance company to do business in the Republic of South Africa and approved by the Employer and having an office or banking facility in the Republic of South Africa. The

Performance Security shall be subject to approval by the Employer and shall be in the form prescribed in the tender documents or in another form approved by the Employer."

In the last line of the last paragraph replace the words "Performance Certificate" *with* "Taking-Over Certificate".

4.4 Subcontractors

Change the title to read "**Subcontractors and Suppliers**"

In the 1st line of the 2nd paragraph, after the word "Subcontractor" *replace the expression* "his agents or employees" *with* "suppliers, their agents or employees".

Add the following sub-paragraphs:

"(e) Where, as a condition of contract, the Contractor is required to employ one or more SMME/BE Subcontractors, then:

(i) the provisions of Sub-clause 5.4 shall apply equally in the case of such SMME/BE Subcontractor, and
(ii) any dispute between the Contractor and an BE or SMME Subcontractor shall be referred to the Engineer who shall convene a meeting of himself, a representative of the Employer and representative of each of the parties involved in the dispute and, thereafter, the Engineer shall submit his recommendations to the Employer for his ruling. The Employer's ruling shall be final and binding.

(f) The Contractor shall pay to the Subcontractor the amount certified as the work carried out by the Subcontractor in each payment certificate, within 14 days of the Contractor being paid by the Employer, or by the 25th of the month following that in which the work was measured and valued for payment, whichever date is earlier. For any late payment to the Subcontractor, the Contractor shall be liable for a penalty of 2% of the amount due."

4.7 Setting Out

Amend the second line of the second paragraph to read;

"……reference, provided that the Contractor shall provide proof of their inaccuracy before they are used."

4.8 Safety Procedures

Add the following sub-paragraph:

"(f) enter into and execute an agreement as provided for under Section 37 (2) of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and shall comply with all other requirements of Act No 85 of 1993 and Construction Regulations, 2014. The agreement in the relevant form shall be prepared at the expense of the Employer."

4.10 Site Data

In the 1st paragraph, 1st sentence, replace "prior to the Base Date" *with* "either as part of or by reference in the Tender Documents or, otherwise, not later than 7 days before the latest date for submission of the Tender Documents", *and delete the 2nd sentence.*

4.13 Rights of Way and Facilities

Add the following paragraph:

"The Contractor shall abide by the procedures for the provision of deviation, haul and construction roads, and the requirements for the construction, maintenance and final reinstatement of such roads, all as set out in the standard Specifications."

4.17 Contractor's Equipment

Add the following paragraph:

"The Contractor shall notify the Engineer, in writing, of the names and addresses of the owners of all major items of equipment not owned by the Contractor."

4.18 Protection of the Environment

*In the 1st paragraph, 1st sentence add "*and shall ensure compliance with all the environmental requirements indicated in part C3 Scope of Work."

Add the following paragraph:

"The Contractor shall indemnify the Employer against any liability arising from or in relation to any of the above matters."

4.19 Electricity, Water and Gas

*In the 1st paragraph, 1st line, delete "*except as stated below*", and delete the 2nd and 3rd paragraphs.*

4.20 Employer's Equipment and Free-Issue Material

Delete "and Free-Issue Material" *from the title of the sub-clause and delete the 3rd and 4th paragraphs.*

4.21 Progress Reports

In the 1st paragraph, 2nd line, delete "in six copies"

4.24 Fossils

In the 1st paragraph, 1st sentence after "fossils" *insert* "and graves" *and in the 2nd sentence, add* "and shall indemnify the Employer against any liability arising from such loss or damage."

6.5 Working Hours

Replace the 1st sentence with the following:

"No work shall be carried out on Site on Sundays or on any special non-working day stated in the Contract Data or between sunset and sunrise on any day, unless:"

6.7 Health and Safety

Replace the 1st paragraph with the following:

"The Contractor shall provide and maintain on the Site adequate and suitable sanitary and first aid services (including the provision at all times of a person qualified to render medical first aid) and a supply of potable water for the Contractor's, the Employer's and the Engineer's personnel engaged on the Contract and, if necessary, similar facilities elsewhere for such personnel off the Site."

Add the following new sub-clause:

6.12 Indemnity by Contractor

The Contractor shall indemnify the Employer against and from all damages, losses and expenses (including legal fees and expenses) resulting from:

(a) the loss of output and delay caused by the slowing down or partial or total stoppage of work by all or any of the Contractor's workforce as a result of a dispute between all or any of the Contractor's workforce and the Contractor.

(b) any unlawful, riotous or disorderly conduct by or amongst the Contractor's personnel."

8.1 Commencement of Work

*In the 1st paragraph, delete the 1st sentence, and in the 2nd sentence replace "*42 days after the Contractor receives the Letter of Acceptance" *with* "28 days of the date of issue of the Letter of Acceptance."

In the 2nd line of the 2nd paragraph, after the words "Commencement Date", *insert "*but within the period stated in the Contract Data*."*

8.2 Time for Completion

Add the following:
"The Contractor shall either complete within the time or period, or respond to within the time or period, the specified activities indicated in the Scope of Work. The Employer may consider an application by the Contractor for an extended time or period for mitigating circumstances as deemed acceptable by the Employer."

8.3 Programme

*Replace the 1st sentence of the 1st paragraph with "*The Contractor shall submit a detailed programme to the Engineer within 14 days of the Commencement Date."

Add to the items to be included in the programme the following sub-paragraph:

"(e) The Contractor's cash flow forecast.
(f) documented details of the contractor's environmental mitigation measures and health and safety plans in respect of all construction activities*"*

In the 2nd paragraph replace "21" *with* "14".

8.4 Extension of Time for Completion

Replace the word "Engineer" *with* "Employer*" in the last sentence of the last paragraph.*

8.7 Delay Damages

Add the following after the second paragraph:

"If the Contractor either fails to complete within the time or period, or respond to within the time or period as prescribed in Sub-Clause 8.2, the specified activities indicated in the Scope of Work, or within the extended time granted in terms of Sub-Clause 8.4 hereof, then the Contractor shall subject to Sub-Clause 2.5 pay delay damages to the Employer for the Contractor's default as stated in the Scope of Work."

10.2 Taking Over of Parts of the Works

Delete the 2nd paragraph.

Between the 3rd and 4th paragraphs insert the following paragraph:

"The Employer may make use of any part of the Permanent Works prior to the issue of a Taking OverCertificate."

Delete the 5th paragraph.

11.9 Performance Certificate

*In the 1st paragraph, 2nd line and in the 2nd paragraph, 1st line, replace the word "*Engineer*" with "*Employer*".*

Delete the last sentence of the 2nd paragraph.

11.11 Clearance of Site

Replace the 1st paragraph with the following:

"With the exception of Plant, Materials and Contractor's Equipment required to complete any outstanding work or to remedy defects or damage as notified by, or on behalf of, the Employer and which Plant, Materials and Contractor's Equipment have been agreed by the Engineer and the Contractor, the Contractor shall, upon receipt of the Taking-Over Certificate, remove all Contractor's Equipment and surplus material, wreckage, rubbish and Temporary Works, from the Site unless otherwise instructed by the Engineer."

*In the 2nd paragraph, replace "*after the Employer receives a copy of the Performance Certificate" with "after the issue of the Taking-Over Certificate*".*

12.3 Evaluation

In the second paragraph replace the second sentence and subparagraphs (a) and (b) with "No new rates or prices shall be negotiated even for large variations in quantities".

Delete the first sentence in the third paragraph, commencing "Each new rate……".

12.4 Omissions

Delete this sub-clause.

13.1 Right to Vary

In sub-paragraph (d) of the third paragraph delete "unless it is to be carried out by others".

13.3 Variation Procedure

Replace the 3rd paragraph with the following:

"Each instruction to execute a Variation, unless the Variation is to be executed on a Daywork basis, shall be a written instruction presented in the form of a Variation order. The Variation order shall be presented to the Employer, who shall signify his approval before the order is signed by the Engineer and issued to the Contractor, who shall acknowledge his acceptance by signing the order. The Contractor shall not accept a Variation order that is not approved and signed by the Employer".

13.5 Provisional Sums

In the 1st line of sub-paragraph (b) after "services" *insert* "and including items for which a prime cost sum has been provided in the Bill of Quantities".

13.6 Daywork

Replace the 2nd and 3rd sentences in the 1st paragraph with "The following procedure shall apply."

Add the following as the 5th paragraph of this sub-clause:

"The work shall be valued in accordance with the Daywork Schedule included in the Contract or, in the absence of a Daywork Schedule or for items not included in the Daywork Schedule the Contractor shall be paid the aggregate of:

(i) the gross remuneration of the workmen for the time they are actually engaged on the work concerned,
(ii) the net cost of Materials actually used,
(iii) an amount in respect of Contractor's Equipment which shall be charged on a time basis at the rates stated in the Tender, failing which at rates, to be agreed between the Contractor and the Engineer or, failing agreement, to be determined by the Engineer on the basis of ruling equipment hire rates and
(iv) the percentage allowances stated in the Contract Data, which allowances shall be held to cover all charges for the Contractor's and/or Subcontractor's profits, timekeeping, clerical work, insurance, establishment, superintendence and the use of hand tools."

13.8 Adjustments for Changes in Costs

Replace this sub-clause with the following:

"The value of certificates issued in terms of Sub-clause 14.6 (excluding the value of those special Materials specified in the Contract Data) shall be increased or decreased by applying a Contract Price adjustment factor calculated according to the formula and the conditions set out in the Contract Price adjustment Schedule appended to these Particular Conditions.

Price adjustments for variations in the costs of special Materials specified in the Contract Data shall be made in the manner set out in the Contract Price adjustment schedule."

14.3 Application for Interim Payment Certificates

In the 1st line of the 1st paragraph, delete "in six copies."

In the 4th line of the 1st paragraph, change "the report" *to* "reports."

In the 2nd paragraph, sub-paragraph (c), after "above amounts" *insert* "and 80% of the value of Materials on Site" *and add the following as a final paragraph:*

"If, as stated in the Contract Data, a Retention Money Guarantee is permitted and the Contractor elects to furnish it, the guarantee shall, at the cost of the Contractor, be executed by an insurance company or bank in a form approved by the Employer.

The said company or bank shall be registered or licensed to do business in the Republic of South Africa and shall have an office and banking facility in the Republic of South Africa and shall be subject to approval by the Employer.

The aggregate liability under the guarantee shall be the maximum amount of retention monies to be retained by the Employer, which amount shall be as stated in the Contract Data.

Other conditions, if any, additional to the above standard conditions shall be as stated in the Contract Data.

The guarantee shall expire on the date on which the last of the retention monies (which, but for the guarantee, would have been retained by the Employer) becomes payable to the Contractor.

The guarantee shall be returned to the guarantor upon final payment of the aggregate liability or on the date of expiry, whichever is the earlier."

14.5 Plant and Materials intended for the Works

In the first paragraph delete "If this Sub-Clause applies" .

Delete the 2nd paragraph.

In the 3rd paragraph, delete sub-paragraphs (b) and (c) (i) and amend sub-paragraph (a) so that (c) (ii) becomes (a) (iii) thus;

"(a) (ii) supported by satisfactory evidence; and
(a) (iii) the relevant Plant and Materials have been delivered to and….."

Add the following paragraph:

"If so agreed in writing by the Employer, the provisions of this Sub-Clause 14.5, as amended herein, shall apply equally to Plant and Materials intended for incorporation in the Permanent Works and stored at places other than the Site."

14.6 Issue of Interim Payment Certificates

In the 2nd line of the 1st paragraph replace "28" *with* "14"

14.7 Payment

In sub-paragraphs (b) and (c) of the 1st paragraph replace "56" *with* "28".

Delete the 2nd paragraph.

14.8 Delayed Payment

Replace the 2nd paragraph with the following:

"These financing charges shall be at the rate prescribed in terms of the Prescribed Rate of Interest Act, 1975 (Act No 55 of 1975)".

14.10 Statement at Completion

In the 2nd line of the 1st paragraph delete "six copies of".

14.11 Application for Final Payment Certificate

In the 2nd line of the 1st paragraph delete "six copies of".

In the 3rd paragraph, replace the last sentence with:

"Thereafter, when the dispute is finally resolved, the Contractor shall then prepare and submit to the Employer (with a copy to the Engineer) a Final Statement."

14.15 Currencies of Payment

Delete this sub-clause.

15.2 Termination by the Employer

Delete subparagraph (f) and replace with the following:

(f) Gives or has given, offers to give or has offered to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:

(i) for doing or forbearing to do any action in relation to the Contract or any other contract with the Employer or State Department or Organ of State, or
(ii) for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other contract with the Employer or State Department or Organ of State,

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

Add the following sub-paragraph:

(g) Misrepresented , whether innocently, negligently or fraudulently, the true facts requested in the tender documents."

Insert the following after the expression e) or f) in the penultimate line of the second paragraph;

"or g)"

Replace the full stop at the end of the third paragraph with a comma and add the following:

"*including the right to terminate any other contract between the Employer and the Contractor and to forbid the Contractor or any employee, partner, shareholder or director of the Contractor to tender on any future projects put out to tender by the Employer for a period of five years from the date of notice of termination, which period may be reduced by application to and at the sole discretion of the Employer."*

17.3 Employer's Risks

Add the following to sub-paragraph (c):

"unless these risks are insurable with the South African Special Risks Insurance Association (SASRIA) at the time of tendering and it is stipulated in the Contract Data that the Contractor is to effect insurance against these risks".

18.1 General Requirements for Insurances

Replace this sub-clause with the following:

"The Contractor shall effect all insurances as have been proposed and agreed by the Contractor as being necessary to adequately cover his insurable obligations under the Contract and shall maintain such insurances for the duration of the Contract.

The Employer shall be entitled at his discretion to call for evidence of the scope and validity of such insurance as and when this may be required.

If required, the Contractor shall provide proof that he has paid all contributions required in terms of the compensation for Occupational Injuries and Diseases, 1993 (Act No 130 of 1993)."

18.2 Insurance for Works and Contractor's Equipment

In the 4th paragraph, delete the wording of sub-paragraph (d) and replace with the following:

"(d) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (g) and (h) of Sub-Clause 17.3 [Employer's Risks], and shall include insurance with the South African Special Risks Insurance Association (SASRIA) that cover loss or damage from the risks listed in sub-paragraph (c) of Sub-Clause 17.3 [Employer's Risks], and".

19.1 DEFINITION OF FORCE MAJEURE

In the third line of sub-paragraph 19.1(iii) insert "or suppliers," *after the word* "Subcontractors".

Insert the following as a new 3rd paragraph:

"Events as listed in sub-paragraph (iii) above may only be classified a "Force Majeure" event, if the following additional conditions are satisfied:

(1) The Contractor has engaged with the persons responsible for the riot, commotion, disorder, strike or lockout; has met with the persons or leaders; and has recorded the persons or leaders' details, their grievances, the organisations involved, all threats made; and has requested the persons or leaders to cease all unlawful conduct; and
(2) The Contractor has obtained proof of the riot, commotion, disorder, strike or lockout, and of any unlawful conduct; and
(3) The Contractor has reported all threats and unlawful conduct to the South African Police Service; and
(4) The Contractor has brought an urgent application to the court on an ex parte basis that correctly identify the respondents and define the unlawful conduct to be interdicted; and
(5) The Contractor has ensured that the court order is enforced."

19.5 Force Majeure Affecting Subcontractor

Amend the title to read "Force Majeure Affecting Subcontractor and Supplier".

In the first line insert "or supplier" after the word "Subcontractor"

20.1 Contractor's Claims

In paragraph 5, insert the following after the first sentence;

"If an extension of time is granted the Contractor shall be paid such additional time-related Preliminary and General allowances as are appropriate having regard to any other compensation which may already have been granted in respect of the circumstances concerned. Payment of costs additional to the above will only be considered if the costs derive from claims that fall within the terms of Clause 13 [*Variations and Adjustments*] and/or Sub-clause 17.3 [*Employer's Risks*]."

Replace the 6th paragraph with the following:

"After receiving a claim or any further particulars supporting a previous claim, the Engineer shall present such claim or particulars to the Employer, together with his recommendations, for a ruling, which ruling shall be given to the Contractor within 42 days after receiving a claim or any further particulars, provided that the said period of 42 days may be extended by application from one Party and approval of the other. If the Employer fails to give his ruling within the specified period, or agreed extension thereto, it shall be deemed that the Employer has dismissed the claim."

Delete the 8th paragraph.

20.2 to 20.8

Replace these sub-clauses with the following:

20.2 Settlement of Disputes

(a) The Contractor shall have the right to dispute any ruling given or deemed to have been given by the Employer or the Engineer, provided that, unless the Contractor shall, within 42 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 Engineer, referring to this Clause, 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 Dispute Notice.

(b) All further references herein to a ruling shall relate to the ruling, or part thereof, specified in the Dispute Notice, as varied or added to by agreement between the Contractor and the Engineer or by the Engineer's decision in terms of sub-paragraph (c) or by the Mediator's opinion to the extent that it has become binding in terms of Sub-clause 20.3(f).

(c) The Engineer shall

(i) before giving his decision on the dispute, consult the Employer thereon and give the Contractor a reasonable opportunity to present written or oral submissions thereon, which latter shall be confirmed in writing within 7 days
(ii) deliver his decision in writing to the Employer and to the Contractor, and
(iii) give his decision within 56 days of his receipt of the Dispute Notice, or within any further period as may be agreed between the Engineer and the Contractor, failing which, he shall be deemed to have given a decision affirming, without amendment, the ruling concerned.

(d) Unless either the Employer or the Contractor, shall, within 28 days after his receipt of notice of the decision in terms of sub-paragraph (c) (ii) or after the decision is deemed to have been given in terms of sub-paragraph (c) (iii), have given notice in writing to the Engineer, with a copy to the other Party, disputing the Engineer's decision or a specific part thereof, he shall have no further right to dispute any part of the ruling not specified in his said notice.

(e) If either Party shall have given written notice in compliance with sub-paragraph (d), the dispute shall be referred to mediation in terms of Sub-Clause 20.3 unless either Party has given written notice to the other Party of its intention to refer the matter in dispute to court, which notice shall be given either:

(i) within 28 days of receipt of notice of the Engineer's decision, or

(ii) within 14 days of receipt by the one Party of the other Party's notice of dispute of the Engineer's decision.

If notice of intention to refer the matter in dispute to Court has been served by either party, the matter in dispute shall not be referred to mediation but shall be referred to Court.

(f) Notwithstanding that the Contractor may, in respect of a ruling, have given a Dispute Notice, the ruling shall be of full force and carried into effect unless and until otherwise agreed by both Parties in terms of Sub-Clause 20.3 (f) or as determined in a court judgement.

20.3 Mediation

(a) The mediation referred to in Sub-Clause 20.2 (e) shall be conducted by a mediator selected by agreement between the Parties or, failing such agreement within 7 days after a written request by either Party for such agreement, nominated on the application of either Party by the President for the time being of the South African Institution of Civil Engineering.

If, for any reason, the person appointed fails to assume or to continue in the office concerned:

(i) the provisions of Sub-Clause 20.3 shall apply *mutatis* mutandis in the appointment of a successor, and
(ii) in making his nomination in terms of this sub-clause, the president for the time being of the South African Institution of Civil Engineering shall, at his own discretion, act in consultation with the presidents for the time being of the South African Association of Consulting Engineers and the South African Federation of Civil Engineering Contractors, and
(iii) if the president required to make a nomination in terms of this sub-clause shall have a direct or indirect interest in the subject matter of the dispute, the nomination shall be made by the chief executive officer or the next senior officer of the body concerned who has no such interest.

(b) Neither Party shall be entitled to be represented at any hearing before, or at, any meeting, or in any discussion, with the mediator except by any of the following:

(i) the Party himself, if a natural person,
(ii) a partner in the case of a partnership,

(iii) an executive director in the case of a company,

(iv) a member in the case of a close corporation,

(v) the Engineer,

(vi) a bona fide employee of the party concerned, and

(viii) a professional engineer appointed for the purpose by the Party concerned.

(c) The mediator shall, as he deems fit, follow formal or informal procedure and receive evidence or submissions orally or in writing, sworn or unsworn, at joint meetings with the Parties or separately or from any person whom he considers can assist in the formulation of his opinion, provided that:

(i) each Party shall be given reasonable opportunities of presenting evidence or submissions and of responding to evidence or submissions of the other Party, and

(ii) each Party shall be given full details of any evidence or submissions received by the Mediator from the other Party or any other person otherwise than at a meeting where both Parties are present or represented.

(d) The mediator shall have the power to propose to the Parties compromise settlements of or agreements in disposal of the whole or portion of the dispute.

(e) The mediator shall, as soon as reasonably practical, give to each of the Parties his written opinion on the dispute, setting out the facts and the provisions of the Contract on which the opinion is based and recording the details of any agreement reached between the Parties during the mediation.

(f) The mediator's opinion shall become binding on the Parties only to the extent correctly recorded as being agreed by the Parties in the mediator's written opinion or otherwise as recorded as being agreed in writing by both Parties subsequent to the receipt of the mediator's opinion.

(g) The dispute on any matter still unresolved after the application of the provisions of sub-paragraph (f) shall be resolved by court proceedings.

(h) Save for reference to any portion of the mediator's opinion which has become binding in terms of sub-paragraph (f), no reference shall be made by or on behalf of either Party, in any proceedings subsequent to mediation, to the mediator's opinion, or to the fact that any particular evidence was given, or to any submission, statement or admission made in the course of the mediation.

(i) Irrespective of the nature of the mediator's opinion:

(i) each Party shall bear his own costs arising from the mediation, and
(ii) the Parties shall in equal shares pay the mediator the amount of his expenses and the amount of his fee based on a scale of fees as agreed between the mediator and the Parties before the commencement of the mediation.

20.4 Reference to Court

If a dispute is still unresolved as provided for in sub-paragraph (g) of Sub-Clause 20.3 or the dispute is one described in Sub-Clause 20.5, the dispute shall be determined by court proceedings, provided that:

(a) nothing herein contained shall deprive the Contractor of the right to institute immediate court proceedings in respect of failure by the Employer to pay the amount of a payment certificate on its due date or to refund any amount of retention money on its due date for refund,
(b) no ruling or decision given by the Engineer in accordance with the provisions of the Contract shall disqualify him from being called as a witness and giving evidence before the court on any matter whatsoever relevant to the dispute concerned, and
(c) the court shall have full power to open up, review and revise any ruling, decision, order, instruction, certificate or valuation of the Engineer relevant to the matter in dispute.

20.5 Special Disputes

Notwithstanding anything elsewhere provided in Sub-Clauses 20.2, 20.3 and 20.4, any dispute between the Contractor and the Employer,

(a) not relating to a ruling, decision, order, instruction or certificate by the Engineer, or

(b) arising after the completion of the Contract or, if a Defects Notification Period is provided, after the termination of that period,

shall be determined, without the application of the provisions of Sub-Clauses 20.2 and 20.3 by court proceedings which may be initiated by either Party, in which event the provisions of Sub-clause 20.4 shall apply.

20.6 Continuing Validity of Sub-Clauses 20.2 to 20.6

Sub-Clauses 20.2 to 20.6 inclusive constitute a separate, divisible agreement from the rest of the Contract and shall remain valid and applicable, notwithstanding that the Works may have been completed or that the rest of the Contract may be void or voidable or may have been cancelled for any reason."

APPENDIX: General Conditions of Dispute Adjudication Agreement

Delete this appendix

ANNEX: Procedural Rules

Delete this annexure

APPENDIX TO THE PARTICULAR CONDITIONS: CONTRACT

PRICE ADJUSTMENT SCHEDULE

1. Contract Price Adjustment

In accordance with Sub-clause 13.8, the value of each certificate issued in terms of Sub-clause 14.6 shall be increased or decreased by the amount obtained by multiplying "Ac", defined in Clause 2 of this Schedule, by the Contract Price Adjustment Factor, rounded off to the fourth decimal place, determined according to the formula:

$$(1 - x)\left[\frac{aLt}{Lo} + \frac{bEt}{Eo} + \frac{cMt}{Mo} + \frac{dFt}{Fo} - 1\right]$$

in which the symbols have the following meanings:

"x" is the proportion of "Ac" which is not subject to adjustment. Unless otherwise stated in the Appendix this proportion shall be 0,15.

"a", "b", "c" and "d" are the co-efficients determined by the Engineer and specified in the Appendix to Tender, which are deemed, irrespective of the actual constituents of the work, to represent the proportionate value of labour, equipment, materials (other than "special materials" specified, in terms of subclause 13.8, in the Appendix to Tender) and fuel respectively. The arithmetical sum of "a", "b", "c", and "d" shall be unity.

"L" is the "Labour Index" and shall be the "Consumer Price Index" for the urban area specified in the Appendix to Tender, as published in the Statistical Release P0141.1, Table A, of Statistics South Africa.

"E" is the "Equipment Index" and shall be the "Mining & Construction Plant & Equipment Price index" as published in the Statistical Release P0151.1, Table 4, of Statistics South Africa.

"M" is the "Materials Index" and shall be the "Civil Engineering Materials Price Indices", as published in the Statistical Release P0151.1, Table 6, of Statistics South Africa. Note that "Civil engineering material - road, refurbishment (excl Bitumen)" is applicable.

"F" is the "Fuel Index" and shall be the index for diesel, as published in the Statistical Release P0142.1, Table 1, of Statistics South Africa.

The suffix "o" denotes the basic indices applicable on the Base Date as defined in sub-clause 1.1.3.1 of the General Conditions of Contract.

The suffix "t" denotes the current indices applicable to the month in which the last day of the period falls to which the relevant payment certificate relates.

If any index relevant to any particular certificate is not known at the time when the certificate is prepared, the Engineer shall estimate the value of such index. Any correction which may be necessary when the correct indices become known shall be made by the Engineer in subsequent payment certificates.

2. Assessment of amount subject to adjustment

For the purpose of calculating the adjustment to the value of the relevant certificates, the amount "Ac" shall be determined by the formula **:**

$$Ac = T – S – D – W – G – Ap$$

In which formula the symbols have the following meanings:

"T" is the summation of the total value of the

(i) preliminary and general items;
(ii) work done and; and
(iii) materials on site

as certified in the payment certificate under consideration without any deduction whatsoever and before any adjustment made in terms of this Schedule

"S" is the aggregate of (i), (ii), (iii) and (iv), referred to below, and included in "T":

(i) the amounts actually expended and substituted for any Prime Cost Sums;
(ii) the value of any work done by Nominated Subcontractors;
(iii) the value of any work done against Provisional Sums; and
(iv) the value of any extra or additional work done under a Variation Order

where special arrangements for price adjustments in respect of those amounts were made and recorded at the time the work was ordered.

"D" is the value of work included in "T" and done at new rates fixed in terms of Sub-clause 12.3, where those rates are not based on labour, equipment or materials costs in force at the time of tendering. Generally new rates may be based on current costs and de-escalated to the base date of the indices, in which case work done at these rates shall not be included in the value of "D".

"W" is the amount included in "T" and paid for any daywork executed at cost plus percentage allowances as set out in sub-clause 13.6 as amended by Particular Condition.

"G" is the amount included in "T" for Materials classified and dealt with as "special materials" in terms of sub-clause 13.8 as amended by Particular Condition.

"Ap" is the summation of all "Ac" amounts determined in terms of Clause 2 of this Schedule for all certificates preceding in time the certificate under consideration.

3	**Reduction of CPAF after Time for Completion has expired**	Save only for additional work or variations ordered to be carried out after the Time for Completion has expired, the Contract Price Adjustment Factor to be applied to certificates relating to work done or materials supplied after the expiry of the Time for Completion shall be half the factor calculated by inserting in the formula referred to in Clause 1 of this Schedule the indices Lt, Et, Mt and Ft applicable at the date of expiry of the Time for Completion.
4	**Special materials**	The price of each "special material" specified in the Appendix to Tender shall be increased or decreased by the net amount of any variation incurred after the date of the tender on the basis set out in the Contract, provided that any claim for adjustment in terms hereof shall be substantiated by the submission of acceptable invoices and any other supporting documents which the Engineer considers necessary for that purpose, and provided also that no further adjustment be permitted to the price of any "special material" after the Time for Completion has expired unless such material forms part of any additional work or variation ordered to be carried out after that date. For the purpose of Sub-clause (1), "the net amount of any variation" in respect of a particular material referred to as a "special material" in terms of Sub-clause 13.8 shall be calculated by multiplying the difference between the rate or price entered in the Contract by the Contractor for that material and the equivalent rate or price actually paid by the Contractor for the material by the quantity of the material in question.
5.	**Assessment of indices if certificates are not issued monthly**	If more than one month intervenes between the month applicable to any payment certificate and the month applicable to the immediately succeeding payment certificate, then the indices "Lt", "Et", "Mt" and "Ft" applicable to the succeeding payment certificate shall each be taken as the arithmetic mean, rounded off to the second decimal place, of the relevant indices applicable to the month of measurement and to such intervening months.

C1.2.2 CONTRACT DATA - INFORMATION PROVIDED BY THE EMPLOYER

APPENDIX TO TENDER

Note: Clause numbers (Cl. No.) refer to the FIDIC "General Conditions of Contract for Construction for Building and Engineering Works designed by the Employer" (1999). The prefix A refers to an amendment in the Particular Conditions.

Item	Clause No	Data
Employer	1.1.2.2	means The Department of Roads and Transport The Employer's address is: Department of Roads and Transport Private Bag X83 Marshalltown 2107
Engineer	1.1.2.4	The Engineer to be appointed for the Consulting Engineering Services for Routine Road Maintenance on RISFSA Class3 roads of the specific Gauteng Region will act as the Engineer.
Communications	1.3	The address for communication between the parties shall be: The detail will be available at the award of the contract
Period of validity of tender	-	90 days after the closing date for tenders
Time for completion of works	1.1.3.3.	3 years (36 months) from the Commencement Date
Defects for notification period	1.1.3.7	6 calendar months
Laws	1.1.6.5	The law governing this contract is South African law
Time for access to the site	2.1	Nil (access on Commencement Date)
Amount of performance security	4.2	5 % of the accepted contract amount (Cl no. 4.11)
Period within which the Performance Security must be provided	4.2	Within 14 days of the issue of the Letter of Acceptance

Special non-working hours/days	A6.5	All designated public holidays (including all foreseeable statutory declared election days),
Period in which works must commence	A8.1	Not later than 14 days after award of the contract
Delay damages of the works	A8.7	Amounts as stated in the Scope of Works (Table C3.1.9/3)
Penalties for non-conformance	A8.13	Amounts as stated in the Scope of Works (Table C3.1.9/3)
SMME Target Values	C3.4.3.2	Refer to Table C3.4.3/1
Daywork allowances	A 13.6	Remuneration of workmen plus 80% Equipment and material at cost plus 15%
Special materials	A 13.8	Bitumen binder extracted from petroleum based products and used on site. Including that used in asphalt, irrespective of whether it is produced and/or placed by the contractor or an approved subcontractor
Evaluation	A 12.3	The term "fixed rate item" shall apply to all items of work listed in the Pricing Schedule. (Including agreed items of work in listed in variation orders.
Contract Price Adjustment	A 13.8	Base Date: October 2021 x = 0,15 a = 0,48 b = 0,37 c = 0,05 d = 0,10 "L" is the Consumer Price Index for the Gauteng area CPA factor rounded to fourth decimal
Retention money: - Percentage	14.3 (c)	5% of the value of the completed work
- Limit	14.3 (c)	R 50 000.00
Minimum amount of interim payment certificate	14.6	Not Applicable
Contractor to insure with SASRIA	A17.3 (c)	Required
Periods for submission of insurance		
a) Evidence of insurance	A18	14 days after the Commencement Date
Relevant policies	A18	14 days after the Commencement Date
Appointment of DAB	A 20.2	Not Applicable

SIGNED BY TENDERER: .....

C1.2.3 CONTRACT DATA – INFORMATION PROVIDED BY THE TENDERER

The Contractor is .....
.....

Physical Address: .....

.....

Telephone: .....
.....

Facsimile: .....
.....

The authorised and designated representative of the Contractor is:

Name: .....
.....

The postal address for receipt of communications is: .....
.....
.....

.....

Telephone: .....
.....

Facsimile: .....
.....

Physical Address: .....
.....

Email: .....
.....

C1.3 OTHER STANDARD FORMS

C1.3.1 FORM OF OCCUPATION HEALTH AND SAFETY ACT 1993 (ACT NO. 85 OF 1993)

This AGREEMENT made at …….. on this the …….. day of …….. in the year …… between THE DEPARTMENT OF ROADS AND TRANSPORT (hereinafter called "the Employer") on the one part, herein represented by ……..…….. in his capacity as ……. and delegate of the Employer in terms of the Employer's standard powers of delegation pursuant to the provisions of Act No. 7 of 1998, and ……. (hereinafter called "the Mandatary") on the other part, herein represented by ……..…… ……. in his capacity as ……

WHEREAS the Employer is desirous that certain works be constructed, viz TENDER NR: ……..:for……..……

.....

and has accepted a tender by the Mandatary for the construction, completion & maintenance of such works and whereas the Employer and the Mandatary have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatary with the provisions of the Occupational Health and Safety Act 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Mandatary shall execute the work in accordance with the contract documents pertaining to this contract.

2. This Agreement shall hold good from its commencement date, to either :

   a) the date of the Performance Certificate issued in terms of sub-clause 11.9 of the FIDIC Conditions of Contract for Construction for building and engineering works designed by the Employer (1999) (hereinafter referred to as "the GCC"), as contained in Volume 1 of the contract documents pertaining to this contract, or

   b) the date of termination of the contract in terms of clauses 15, 16 or 19 of the GCC.

3. The Mandatary declares himself to be conversant with the following:-

   a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act.
      i) Section 8: General duties of employers to their employees.
      ii) Section 9: General duties of employers and self-employed persons to persons other than employees.
      iii) Section 37: Acts or omissions by employees or mandataries and iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.

   b) The procedures and safety rules of the Employer as pertaining to the Mandatary and to all his subcontractors.

4. In addition to the requirements of sub-clause 4.8, 6.7 and 17.1 of the GCC and all relevant requirements of Volume 3 of the contract documents pertaining to this contract, the Mandatary

agrees to execute all the works forming part of this contract and to operate and utilize all machinery, plant and equipment in accordance with The Act.

5. The Mandatary is responsible for the compliance with the Act by all his subcontractors, whether or not nominated and/or approved by the Employer.

6. The Mandatary warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993, which cover shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

7. The Mandatary undertakes to ensure that he and/or his subcontractors and/or their respective employees will at all times comply with the following conditions:

    a) The Mandatary shall assume the responsibility in terms of Section 16.1 of The Act. The Mandatary shall not delegate any duty in terms of Section 16.2 of The Act without the prior written approval of the Employer. If the Mandatary obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.

    b) All incidents referred to in The Act shall be reported by the Mandatary to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.

    c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of The Act into any incident involving the Mandatary and/or his employees and/or its subcontractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

SIGNED FOR AND ON BEHALF OF EMPLOYER: .....

WITNESS: .....

NAME (IN CAPITALS) .....

SIGNED FOR AND ON BEHALF OF THE MANDATARY .....

WITNESS: .....

NAME (IN CAPITALS): .....

C1.3.2 FORM OF GUARANTEE

To: The Department of Roads and Transport
Private Bag X83
Marshalltown
2107

Note to tenderer:

This pro forma is for information only. The successful tenderer's guarantor will need to reproduce it without amendment, omission or addition for completion and lodgement with the Employer. A separate copy of this pro forma will be issued to the successful tenderer with the letter of acceptance.

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

1. I/We , the undersigned, and ..... in our respective capacities as .....
and .....
and as such duly authorised to represent: .....
(hereinafter referred to as "the Guarantor") ***(in the case of a company, a resolution to be attached)***

do hereby hold at your disposal the amount of .....

(R…….) including VAT, for the due fulfilment by ..... ***(insert the name of Contractor)*** (hereinafter referred to as "the Contractor") of its obligations to The Department of Roads and Transport (hereinafter referred to as "Employer") in terms of the above stated contract between the Contractor and the Employer.

2. The Guarantor hereby renounces the benefits of the exceptions non numeratae pecuniae, non causa debiti, excussionis and divisionis, the meanings and effect whereof we declare ourselves to be fully conversant.

3. The Guarantor undertakes and agrees to pay to the Employer the said amount of R .....

.....

(R……) including VAT, or such portion as may be demanded on receipt of a written demand from the Employer, which demand may be made by the Employer if, (in your opinion and at your sole discretion), the said Contractor fails and/or neglects to commence the work as prescribed in the contract or if he fails and/or neglects to proceed therewith or if, for any reason, he fails and/or neglects to complete the services in accordance with the conditions of contract, or if he fails or neglects to refund to the Employer any amount found to be due and payable to the Employer, or if his estate is sequestrated or if he surrenders his estate in terms of the Insolvency Law in force within the Republic of South Africa.

4. Subject to the above and without in anyway detracting from your rights to adopt any of the procedures set out in the contract, the said demand can be made by you at any stage.

5. The said amount of R .....

(R…….) including VAT, or such portion as may be demanded may be retained by the Employer on condition that after completion of the service, as stipulated in the contract, the

Employer shall account to the Guarantor showing how this amount has been utilised and refund to the Guarantor any balance due.

6 This guarantee is neither negotiable nor transferable and

a. must be surrendered to the Guarantor at the time when the Employer accounts to the Guarantor in terms of clause 5 above, or
b. shall lapse upon the issue of the Taking-Over Certificate in terms of sub-clause 10.1 of the General Conditions of Contract and
c. shall not be interpreted as extending the Guarantor's liability to anything more than payment of the amount guaranteed.

7 This guarantee shall be governed by South African Law and subject to the jurisdiction of South African Courts

THUS DONE AND SIGNED AT .....

ON THIS ..... DAY OF ..... 20 .....

GUARANTOR: .....

AS WITNESSES: 1 ..... 2 .....

NAMES (PRINT) 1 ..... 2 .....

ADDRESSES 1 ..... 2 .....

....

....

Pro-forma

C1.3.3 FORM OF REGISTRATION OF CONTRACT WITH DEPARTMENT OF LABOUR

Annexure A

Occupational Health and Safety Act, 1993 Construction Regulations, 2014 Regulation 4 of the Construction Regulations, 2014 NOTIFICATION OF CONSTRUCTION WORK

1. (a) Name and postal address of principal contractor:

.....

.....

(b) Name and telephone number of principal contractor's contact person:

.....

2. Principal contractor's compensation registration number:

.....

3. (a) Name and postal address of client:

*The Department of Roads and Transport , **(insert Regional office postal address)***

(b) Name and telephone number of client's contact person or agent:

Client: ***(enter Project Manager name and telephone number)***

.....

Agent: ***(enter Engineer name and telephone number)***

.....

4. (a) Name and postal address of designer(s) of the Project:

.....

(b) Name and telephone number of the designer's contact person:

.....

5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of Regulation 8(1):

.....

6. Name(s) of principal contractor's subordinate supervisors on site appointed in terms of Regulation 8(2):

.....

7. Exact physical address of the construction site or site office:

.....

8. Nature of construction work:

.....

9. Expected commencement date: .....

10. Expected completion date: .....

11. Estimated maximum number of persons on the construction site: .....

12. Planned number of contractors on the construction site accountable to the principal contractor:

.....

13. Name(s) of contractors already chosen:

.....
.....

.....
.....

.....
.....

.....

....
PRINCIPAL CONTRACTOR DATE

.....

.....
CLIENT DATE

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR PRIOR TO COMMENCEMENT OF WORK ON SITE.
- ALL PRINCIPAL CONTRACTORS THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER PRINCIPAL CONTRACTOR ON THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK

C1.3.4 FORM OF BANKING DETAILS

Notes to Contractor:

1. **The Employer applies an Electronic Funds Transfer system for all payments.**
2. **If you are already registered as a vendor with the Employer, you are not required to submit the documentation as per note 3.**
3. **If you are not registered as a vendor with the Employer, you are required to supply:**
   - **an original cancelled cheque bearing your company name and account number; or**
   - **if you are unable to supply an original cancelled cheque, you are to provide a letter on your letterhead as per the pro forma below and return the original letter to the address as stated in clause 1.3 of C1.2.2 - Information provided by the Employer, delivered by hand or sent by post.**

To:
The Department of Roads and Transport
Chief Directorate Maintenance
1215 Nico Smith Street
Koedoespoort
Pretoria
0186

Dear Sir

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

BANKING DETAILS

By signing this document we accept the following:

- The banking details submitted are those of ***(Note to Compiler: insert name of successful contractor)*** and we take full responsibility for their correctness.

- We indemnify the Employer from any and all outcomes if an electronic transfer is made into an incorrect bank account using the banking details submitted.

Account Name: ..... ……

Bank: ..... ……

Branch Name: ..... ……

Branch Code: ..... ……

Account Number: ..... ……

Yours sincerely

.....
Authorised Signatory for

DATE: ‘ .....

PART C2: PRICING DATA

GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

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C2.2 BILL OF QUANTITIES (ALSO PROVIDED ON A COMPACT DISC) C2.5

C2.1 PRICING INSTRUCTIONS

C2.1.1 Measurement and payment shall be in accordance with the relevant provisions of the Standard Specification for Routine Road Maintenance, Volume 2 (October 2001), issued by The South African National Roads Agency SOC Limited (SANRAL) or COLTO Standard Specification for Road and Bridge Works for State Road Authorities (1998 edition) as amended in the Scope of Works where applicable.

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

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

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

Unit: The unit of measurement for each item of work as defined in the COLTO Standard Specification for Road and Bridge Works for State Road Authorities (1998 edition).

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

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

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

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

Provisional Sum: An amount allowed for an item and its extent of which is alluded to in the Bill of Quantities, the Scope of Work or elsewhere, but of which the quantity of work is not known.

C2.1.4 The quantities set out in the Bill of Quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the Bill of Quantities, will be used to determine payments to the Contractor.

The validity of the Contract shall in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment. Work is valued at the rates or lump sums tendered.

C2.1.5 Rates and lump sums shall include full compensation for overheads, profits, incidentals, tax (other than VAT), etc, and for the completed items of work as specified in the standard specifications and Project Data and for all the risks, obligations and responsibilities specified in the General Conditions of Contract, Particular or Special Conditions of Contract, except in so far as the quantities given in the Bill of Quantities are only approximate.

C2.1.6 The tenderer shall fill in a rate or a lump sum for each item where provision is made for it even where no quantities are given. Items against which no rate or lump sum has been entered in the tender will not be paid for when the work is executed, as payment for such work will be regarded as being covered by other rates or lump sums in the Bill of Quantities.

The tenderer shall fill in a rate against all items where the words “rate only” appears in the amount column. Although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item actually be required. Tenders should note the provisions of clause C2.1.10 below.

If the tenderer should group a number of items together and tender one lump sum for each group of items, this single tendered lump sum shall apply to that group of items and not to each individual item, or should he indicate that full compensation for any item has been included in the rate for another item, the rate for the item included in another item shall be deemed to be nil.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the contract.

C2.1.7 The short descriptions of the payment items in the Bill of Quantities are only given to identify the items and to provide specific details. Reference shall, *inter alia*, be made to the Contract Data, General Conditions of Contract and Particular / Special Conditions of Contract for more detailed information regarding the extent of work entailed under each item.

C2.1.8 Provisional Sums: Each Provisional Sum shall only be used, in whole or in part, in accordance with the Employer’s instructions and the Contract Price shall be adjusted accordingly. The total

sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Employer shall have instructed.

For each Provisional Sum, the Employer may instruct plant, materials or services to be procured by the Contractor in accordance with the Employer's policies, and for which there shall be included in the Contract Price:

The actual amounts paid (or due to be paid) by the Contractor, and

A sum for compilation and printing of procurement documentation, quotation/tender process and evaluation, and all overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate tendered in the Bill of Quantities.

The Contractor shall produce all quotations, invoices, vouchers and accounts or receipts in substantiation of any claim under a Provisional Sum.

C2.1.9 Subject to the conditions stated clause C2.1.10 below, the rates and lump sums filled in by the tenderer in the Bill of Quantities shall be final and binding with regard to submitting the tender, and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the tender. Should there be any discrepancies between the tender sum and the correctly extended and totaled Bill of Quantities, the rates will be regarded as being correct, and the Employer shall have the right to make adjustments to the tender sum to reconcile the tender sum with the total of the Bill of Quantities. In such an event the tenderer will be consulted but, failing agreement between the parties, the decision of the Employer shall be final and binding. Adjustment of the tender sum will take place prior to the signing of the contract. In their own interest tenderers must make doubly sure of the correctness of their tendered rates, the extensions and the tender sum.

C2.1.10 A tender may be deemed unresponsive if the unit rates or lump sums for some of the items in the Bill of Quantities are, in the opinion of the Employer, unreasonable or out of proportion, and if the tenderer fails, within a period of seven (7) days of having been notified in writing by the Employer to adjust the unit rates or lump sums for such items, to make such adjustments.

C2.1.11 All rates and sums of money quoted in the Bill of Quantities shall be in South African Rand and whole cents

C2.1.12 The item numbers appearing in the Bill of Quantities refer to the corresponding item numbers in the Scope of Work.

C2.1.13 The Bill of Quantities is provided electronically on a compact disc. The Bill of Quantities in the tender document **must** still be completed in black ink and signed (hard copy). The electronic copy of the priced Bill of Quantities shall be submitted with the tender. In case of a contradiction between the electronic and printed copies the printed copy (hard copy) will take precedence.

Part C3: Scope of Work

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C3.1 PROJECT DESCRIPTION

C3.1.1 SCOPE

This section provides the description of the project and the general requirements for executing the work. The work required is the routine road maintenance of the provincial roads in Gauteng as described in the document
Only Contractors who are registered with the Construction Industry Development Board with a Contractor grading designation off **6 CE or higher** will be eligible to undertake the operational work.

The services to be provided by the Contractor include all activities, physical and others, which the Contractor needs to carry out in order to comply with the completion and responding times and other output and acceptance criteria indicated in the contract, or with any other requirements of the contract. In particular they include physical works associated with the road-related assets and items described in the Scope of Works.

C3.1.2 DESCRIPTION OF THE WORKS

C3.1.2.1 Description of site

(a) Location of site

The general locality of the site is the provincial roads in Gauteng province as indicated in C4.1 Site Plan and the table below indicating the specific road sections

The term “Site” as defined in the FIDIC Conditions of Contract for Construction, 1999, will comprise the road reserve of existing selected provincial roads under the jurisdiction of the department. The site comprises of RISFSA CLASS 3 selected roads as set out in Table C3.1.2/1: CLASS 3

TABLE C3.1.2/1 CLASS 3: PACKAGE E CONTRACT E2

ROAD	FROM	TO	ROUTE NR	DISTRICT	LENGTH	RISFSA CLASS
D795	N1/21	Pretoria/Benoni	R562	Krugersdorp	0.66	3
D795	P1/2	K27		Krugersdorp	7.19	3
D795	P38/1	P122/1		Benoni	1.07	3
K103	P1/2	P158/1 (OORBRUG)		Pretoria	2.65	3
K103	P158/1 (OORBRUG)	Start of dual c/way		Pretoria	1.07	3
K103	Start of dual c/way	P252/1		Pretoria	0.48	3
K103	P252/1	End of dual c/way		Pretoria	1.72	3
K103	End of dual c/way	P157/1 & P36/1		Pretoria	2.8	3
P1/2	Pretoria Municipal border	P151/1	R101	Pretoria	2.03	3
P1/2	P151/1	Pretoria Municipal border	R101	Pretoria	1.14	3
P1/2	Pretoria Municipal border	P252/1	R101	Pretoria	1.1	3
P1/2	P252/1	Start of dual c/way	R101	Pretoria	3.32	3
P1/2	Start of dual c/way	K103	R101	Pretoria	0.12	3
P1/2	End of dual c/way	P102/1	R101	Pretoria	0.36	3
P1/2	P102/1	P158/1	R101	Pretoria	5.65	3
P1/2	P158/1	N1/21	R101	Pretoria	3.27	3

P1/2	N1/21	K27	R101	Pretoria	3.96	3
P1/2	K27	Pretoria/KrugersdorpD795	R101	Pretoria	1.51	3
ROAD	**FROM**	**TO**	**ROUTE NR**	**DISTRICT**	**LENGTH**	**RISFSA CLASS**
P102/1	P66/1	P1/2	R34	Pretoria	7.99	3
P38/1	Municipal border	N1/21		Pretoria	2.21	3
P38/1	N1/21	End of dual c/way		Pretoria	0.16	3
P38/1	End of dual c/way	Pretoria/Benoni		Pretoria	6.63	3
P38/1	Pretoria/Benoni	D795		Benoni	2.6	3
P38/1	D795	Intersection with D795		Benoni	2.2	3
P38/1	D795	K27		Benoni	1.8	3
P38/1	K27	P91/2	M57	Benoni	7.16	3
P38/1	P91/1	D1988		Benoni	0.11	3
P38/1	D1988	P91/1	M57	Benoni	0.68	3
P38/1	P91/2	P68/1	M57	Benoni	0.33	3
P38/1	P68/1	Town border		Benoni	3.41	3
P38/1	Town border	Start of Gauteng road		Benoni	7.9	3
P38/1	Start Gauteng road	Start of Municipality		Benoni	0.42	3
P122/1	BEGIN DUBBELPAD	P36/1 (EINDE DUB.)		Pretoria	0.27	
P122/1	P38/1 & K27	D795		Pretoria	3.63	
P122/1	D795	D781		Pretoria	0.31	
P122/1	D781	D2383		Pretoria	3.93	
P122/1	D2383	P157/1		Pretoria	1.93	
P122/1	P157/1	D2382		Pretoria	0.36	
P122/1	D2382	BEGIN DUBBELPAD		Pretoria	7.15	
P122/1	BEGIN DUBBELPAD	P36/1 (EINDE DUB.)		Pretoria	0.27	
				TOTAL (Km)	**101.55**	

This includes all on-ramps and off-ramps forming part of an interchange, as well as overpasses and underpasses within the provincial road reserve up to the limits of the Provincial responsibility. Excluded are national, municipal and private cross roads, which are not accessible from the road reserve of the provincial road, but the overpass and underpass structures are part of the “Site”.

The “Site” will also include all road signs within 500 metres of an intersection or interchange, which form part of the road signs layout for the provincial road.

The “Site” will also include land not provided by the Employer, where equipment and/or materials for use in the permanent works of the contract can be stored and/or stockpiled with the proviso that the land selected for this purpose be approved by the Engineer. The Contractor must make the Contractor’s own arrangements for the use of such land and must obtain written approval from the owner(s) concerned. Possible camp sites will be indicated during the Tenderers' clarification meeting.

(b) Access to the site

Access to the site shall be from established interchanges, intersections and approved accesses.

C3.1.2.2 Nature of work

The description of the project contained in this section is merely an outline of the contract works and shall not limit the work to be carried out by the Contractor under this contract. Approximate quantities of each type of work to be carried out in accordance with the contract documents are listed in the Bill of Quantities bound in this volume.

The nature of work to be carried out under this contract includes:

- Establishment of camps on site
- Inspection of the road and night inspections
- Accommodation of traffic
- Pavement layers repairs
- Crack sealing and patching of asphalt pavements
- Repair of slope failures and wash-aways
- Stabilisation of slopes
- Construction of drainage works to combat erosion
- Cleaning of all drainage structures, including removal of grass and debris from grids, as well as clearing bridge drainage ports and scuppers • Repairing damaged fencing
- Clearing refuse from the road reserve, lay-byes and interchanges
- Repairing damaged road signs
- Cleaning of road signs
- Installation and replacement of roadstuds
- Repairing damaged guardrails
- Road marking
- Regular mowing of grass in the road reserve including the median and the removal of grass cuttings
- Application of herbicide on road edges and around road signs
- Eradication of weeds and undesirable plant growth
- Burning or cutting of firebreaks and assistance with veld fires
- Maintenance of trees and shrubs
- Supply and spreading of topsoil
- Emergency assistance
- Removal of wrecks and abandoned vehicles
- Minor road works done under daywork

The Contractor shall be required to attend meetings relating to the Works and the site, *inter alia* Incident Management System, Disaster Management Forum, Public Liaison Committee, Farmers' Association, and Fire Protection Association.

C3.1.2.3 Detailed description of the project

The route description of the provincial road sections for which routine road maintenance will be provided by this contract, varies and is as indicated in the above tables:

C3.1.2.4 Time for completion

The Time for Completion of the Works shall be 3 years (36 months) from commencement date.

C3.1.3 DRAWINGS

The reduced drawings that form part of the tender document shall be used for tender purposes only.

The Contractor will be supplied with drawings. These drawings are issued free of charge and the Contractor shall make any additional prints the Contractor may require at the Contractor's own cost.

Any information in the possession of the Contractor, which the Engineer requires to record as-built information, shall be supplied to the Engineer before a Taking-Over Certificate will be issued.

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

C3.1.4 POWER SUPPLY AND OTHER SERVICES

The Contractor shall make the Contractor's 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 shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required

C3.1.5 CONSTRUCTION IN CONFINED AREAS

It may be necessary for the Contractor to work within confined areas. Except where provided for in the specifications, no additional payment will be made for work done in such confined areas. In certain instances the width of the work to be undertaken may decrease to zero and the working space may be confined. The work method in such confined areas will be determined by the Contractor's constructional equipment.

However, the Contractor must note that measurement and payment will only be made in accordance with the authorised dimensions, irrespective of the method used for achieving these dimensions and that the tendered rates and amounts shall include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for additional payment be considered in such cases.

C3.1.6 CONTRACTOR'S CAMP SITE

The Contractor shall provide a suitable site for the Contractor's camp and for accommodating the Contractor's labourers. The Contractor will provide, at the camp site, an office for the Engineer as specified.

C3.1.7 ADDITIONAL REQUIREMENTS FOR CONSTRUCTION ACTIVITIES

In addition to the requirements specified in the Standard Specifications, the Contractor shall adhere to the following requirements.

C3.1.7.1 Accommodation of traffic

Reference shall be made to the requirements shown on the drawings as well as to Section M0500 of the Standard Specifications where temporary traffic control measures and limitations regarding lane closures, work areas and the unoccupied spacing of such closures are detailed.

Any cost associated with the accommodation of traffic must be included in the relevant payment items under Section M0500.

C3.1.7.2 Crack sealing and pavement failure repairs

Crack sealing and pavement failure repairs shall be ordered by the Engineer as specified in Series M1000 of the Standard Specifications. Crack sealing shall normally be ordered in late winter or early spring before the summer rains, although further crack sealing may be required in summer.

The Contractor will be supplied with a schedule of work to be undertaken on the affected sections and the programming of the execution thereof is to be agreed with the Engineer.

C3.1.7.3 Construction of drainage works to combat erosion

The Engineer may instruct the Contractor to construct new drains or to repair drainage works damaged by stormwater. Under normal circumstances, this work will generally not require the use of specialist skills or equipment and will be limited to minor earthworks and concrete works.

C3.1.7.4 Cleaning of drainage structures

The Contractor shall clean concrete drainage structures to maintain the acceptance criteria as specified. The Engineer may order the cleaning of earth drainage channels.

C3.1.7.5 Clearing of the road reserve

The Contractor shall have sufficient resources available to clear the entire road reserve included in this contract, at least at the times and frequencies as specified in the Specifications.

The Engineer may order additional clearing during peak traffic periods, particularly during the months of July and December.

C3.1.7.6 Repairing damaged fencing, road signs and guardrails,

On a regular basis, the Contractor shall inspect the site to check for damaged fencing, road signs and guardrails.

Damage to fencing, road signs and guardrails shall be reported to the Engineer who will instruct the action to be taken by the Contractor. Within thirty (30) days of the Commencement Date the Contractor shall inspect all the guardrails to ensure that they have been correctly overlapped. A report on this shall be submitted to the Engineer.

All damaged materials replaced or removed from site will remain the Employer's property and may only be disposed of on instruction of the Engineer. Damaged guardrails suitable for re-use must be returned to the Employer for straitening. This will only be done at the discretion of the Engineer.

The Contractor shall control all vegetation growth around road signs in such a way necessary to prevent any damage to the road signs due to veld fires. The Contractor shall replace all road signs damaged due to veld fires at the Contractor's own cost.

C3.1.7.7 Replacement of roadstuds

The Contractor shall only replace roadstuds as specified in Section M4300 of the Standard Specifications, when and as instructed by the Engineer.

C3.1.7.8 Environmental requirements

Trees and shrubs established in landscaped areas of interchanges and in the road reserve may under no circumstances be disturbed without specific instruction from the Engineer for their removal. Trees and shrubs inadvertently destroyed by the Contractor shall be replaced with the equivalent at the Contractor's own cost.

Disposal of any bituminous-based material shall only be at an approved location and by means of an approved method, arranged beforehand with the Engineer. Bituminous binders shall not be disposed of on the Site, but shall be returned to the supplier for disposal.

C3.1.7.9 Mowing of grass

The mowing of grass shall be classified into shoulder mowing and general mowing as specified in Section M6100 of the Standard Specifications.

C3.1.7.10 Fire breaks

The Contractor will be required to assist with the clearing and maintenance of fire breaks along the common boundaries with land owners along the route of the road in fire control areas, in terms of the Veld Fire Act, as described in the specifications or as directed by the Engineer.

C3.1.7.11 Maintenance and establishment of plants, trees, shrubs and grass

Topsoiling and hydroseeding of sparse areas may be ordered by the Engineer as specified in Series M6000 of the Standard Specifications. If ordered, this work will normally be undertaken in early spring or late summer when mowing operations are not envisaged.

The Contractor will not be expected to handle individual areas on a piecemeal basis, but will be supplied with a schedule of areas to be treated and be given an opportunity to agree a programme for this work with the Engineer. These comments are also applicable to the application of fertiliser and herbicides, and the planting of additional trees and shrubs.

Maintenance of trees and shrubs shall be undertaken as specified in Section M6400 of the Standard Specifications. Such maintenance may include hoeing around trees and shrubs, trimming and watering. Additional watering of trees and shrubs may be ordered by the Engineer in dry periods and shall be paid for under the appropriate payment item.

C3.1.7.12 Emergency assistance

The emergency assistance as specified in Series M7000 of the Standard Specifications shall normally be ordered in the event of natural and unnatural events in the road reserve or on the road surface. This can include accidents involving commercial or passenger vehicles, clearing of spillages, sheltering of animals, fire fighting and safeguarding of dangerous areas.

The Contractor will also be required, in full liaison with and under the instruction of the relevant authority, to manage and co-ordinate the clearing of accident scenes so as to ensure that the road is reinstated to a safe condition.

C3.1.7.13 Daywork

Sub-clause 13.6 of the FIDIC Conditions of Contract for Construction, 1999, refers.

The Contractor shall tender the rates applicable to daywork, as provided for in the Bill of Quantities. These rates will be taken into account in the adjudication of tenders.

The tendered rates shall be considered to include full compensation for the work to be performed, including supervision of labour, all plant operators and other operating costs, overheads and profit.

Hourly rates for transport and equipment shall apply to the actual number of hours for which the vehicles or equipment are required for a specific item of work, including travelling time if applicable.

The Contractor shall maintain a hard cover duplicate book on site for the purposes of recording daywork. The Contractor shall record the total time claimed under each relevant item of the Bill of Quantities and the applicable instruction of the Engineer, and shall ensure that the total times claimed are agreed and signed daily by the Engineer's representative on site.

The Contractor shall not claim daywork for any work for which an applicable rate has been tendered or agreed to in writing by the Engineer.

The cost of materials used and paid for by the Contractor, as authorised by the Engineer, shall be reimbursed at net cost, exclusive of Value Added Tax, plus the percentage as tendered for the Contractor's overhead charges and profit.

In the event where no allowance has been made for a specific item in the Bill of Quantities, the Engineer may order daywork according to sub-clause 13.6 of the FIDIC Conditions of Contract for Construction, 1999.

C3.1.8 ALLOWANCE FOR OTHER CONTRACTORS AND ACCOMMODATION OF OTHER CONTRACTS

In addition to the requirements of clause 4.6 of the FIDIC Conditions of Contract for Construction, 1999 the Contractor must take note of the presence of other Contractors on the site and make allowances for them on the site. This may involve adapting the Contractor's programme to accommodate the work of other Contractors and ensuring access to their sites.

Although details of such contracts are not known it may include, *inter alia*, periodic maintenance, special maintenance, rehabilitation and upgrade contracts. Depending on the scope of works for these contracts, the Contractor may be relieved of his responsibilities on the relevant section of the site during the construction period only, and this may include a reduced scope of work on performance based items where applicable.

The contracts which may be implemented during the Time for Completion of this contract or any extension thereof as may be instructed by the Employer, are scheduled in Table C3.1.8/1:

TABLE C3.1.8/1 : PROGRAMME OF CONTRACTS

SECTION	WORKS DESCRIPTION	PERIOD	
		FROM	TO
Will be finalised during construction			

C3.1.9 PROGRAMME, RESTRICTION AND COMPLETION OF ACTIVITIES

This clause covers matters relating to the programme of work, restriction on certain maintenance activities, completion and responding time of specified activities, compliance with the specifications, and related delay damages and penalties.

C3.1.9.1 Programme

The Time for Completion of the Works is specified in the Appendix to Tender, including an option for an extension at the sole discretion of the Employer.

The Engineer will determine the extent and frequency of the work to be executed in terms of the contract, as certain activities are dependent upon the climatic conditions encountered during the period of the contract. The Engineer will agree on an annual programme of work per route section with the Contractor. Reference is made to clause M0203 of the Standard Specifications which specifies the requirements for the submission of a programme.

TABLE C3.1.9/1: FREQUENCY AND COMMENCEMENT PERIOD OF ACTIVITIES

Activity	Frequency	Start period
M2500: Cleaning of concrete drains with mechanical vacuum sweepers	Once every two weeks	On commencement date
M0400: Route patrol	Three Times per day (8 hour cycles)	On commencement date
M3200: Collection and removal of debris and litter	Once per week	On commencement date
M6100: Controlling vegetation growth General mow	Four times per year	January – February March - April June - July Nov - Dec

C3.1.9.2 Restriction on maintenance activities

Certain maintenance activities will be restricted on days with increased traffic flows. These days will be, for example, the day of school closure, over long weekends and public holidays. The Contractor must allow for these restrictions in his programme and no extension of time or claims in this regard will be considered.

Normal routine maintenance involving lane closures (except in the event of emergency normalisation) shall be restricted on the days and for the periods stated in Table C3.1.9/2.

TABLE C3.1.9/2: RESTRICTION ON MAINTENANCE ACTIVITIES

Day(s)	Activity to be restricted	Period of restriction
School closures in Gauteng	Lane closures, except in the event of emergency normalisation	From 12:00 on the day of school closures until 07:00 on the following day
Easter weekend	Lane closures, except in the event of emergency normalisation	From 12:00 on Thursday until 07:00 on Tuesday

TABLE C3.1.9/2: RESTRICTION ON MAINTENANCE ACTIVITIES

Day(s)	Activity to be restricted	Period of restriction

Long weekends and public holidays	Lane closures, except in the event of emergency normalisation	From 12:00 on the day preceding commencement of long weekend or public holiday until 07:00 on the day following the long weekend or public holiday
13 to 17 December and 2 to 8 January	Lane closures, except in the event of emergency normalisation	From 00:00 on the commencement date of the restriction until 24:00 on the last date of the restriction
Weekdays	Lane closures, except in the event of emergency normalisation	Weekdays before 09:00 and after 15:00

C3.1.9.3 Completion time of specified activities and penalties

Generally the maintenance activities covered by this contract will be on a continuous basis. However, certain specified activities are considered to be a priority or are critical, and it is a condition of contract that they shall be completed or responded to as specified, after receiving an instruction from the Engineer.

Should the Contractor fail to complete the specified activity or respond timeously, or comply with the specifications, he shall be liable for delay damages or a penalty as specified in Table C3.1.9/3.

Definitions:

Completion time:

Completion time is defined as that period from the date on which an instruction is received by the Contractor from the Engineer, to the date of full completion.

Responding time:

Responding time is defined as that period from the time on which an instruction is received by the Contractor from the Engineer, to the time of reporting at the place of the required activity, by the designated standby supervisor and team.

These activities, specified times, delay damages, and including penalties for work not complying with the specifications, are indicated in Table C3.1.9/3.

Notes:

(a) Indicated day means a calendar day.
(b) There shall be no reduction of delay damages or penalty for partial completion of works.
(c) Delay damages and penalties as specified in Table C3.1.9/3, as well as elsewhere in the Scope of Work shall be deducted from the amount Ac as defined in sub-clause 13.8 of the Particular Conditions of Contract, prior to multiplying the amount Ac by the Contract Price Adjustment Factor.
(d) Payment of delay damages or a penalty shall not absolve the Contractor of any claims, or relieve the Contractor of any of his duties, obligations or responsibilities under the contract.

TABLE C3.1.9/3: SPECIFIED ACTIVITY PERIODS, DELAY DAMAGES AND PENALTIES

Activity	Completion time	Responding time	Penalty for late responding	Penalty for late completion	Penalty for not to specification
M0400: Route Patrol Services 1. Not submitting daily reports 2. Equipment missing as specified 3. Visual Capturing Device not working when leaving for patrol 4. Visual Capturing Device not working on route	daily daily	2 hours			R1000/day R500/article R5000/incident R500/hour
M0500: Accommodation of traffic 1. Lane closure not to specification 2. Sign not to specification	inspection daily				R5000/closure R500/sign
M1200: Repair of potholes, edgebreaks and surface failures 1. Temporary repair of potholes and surface failures 2. Permanent repair of failure 3. Temporary repair of edgebreaks	2 days 4 weeks 14 days			R1000/day R1000/day R1000/m	R5000/section
M1700: Repair of slope failures and washaways	2 weeks	2hours	R500/hour	R1000/day	
M2300: Cleaning of waterway structures	inspection				R5000/structure
M2400: Cleaning of prefabricated culverts	inspection				R1000/structure
M2500: Cleaning of concrete drains and culverts	inspection				R1000/structure
M2600: Cleaning and maintenance of existing earth drains	1 month			R500/day	
M2700: Edge build-up removal	inspection monthly				R2000/section
M3200: Collection and removal of debris and litter	inspection on pick up days				R5000/ inspection
M4100: Erection and repair of permanent road traffic signs 1. R-Series (after delivery) 2. W-Series (after delivery) 3. G-Series (after delivery) 4. Information (after delivery)	2 days 2 days 4 days 4 days			R1000/day R1000/day R1000/day R1000/day	
M4400: Guardrail erection and maintenance 1. Repair 2. Safeguard area	3 days 8 hours			R2000/day R2000/day	
M6100: Controlling vegetation growth: Mowing and cutting 1. General mowing 2. Mowing operation more than 7.0 km ahead of labourers finishing behind	1 month	1 week	R2000/day	R2000/day	R1000/day R1000/day
M7000: Emergency assistance 1. Accident restoration and clearing of spillages 2. Sheltering of animals 3. Fire fighting 4. Safeguard of dangerous areas		1 hour 1 hour 1 hour 1 hour	R1000/hour R1000/hour R2000/hour R2000/hour		
M9000: Daywork	As instructed	as per JI	R1500/day	R1500/day	

GENERAL 1. OH&S Plan 2. Quality Assurance System 3. Other specified or programmed activity 4. Any particular, routine or nonroutine activity on instruction of the Engineer	As specified As specified As instructed As instructed	As instructed As instructed	R2000/day R2000/day	R2000/day R2000/day	R1000/incident R1000/incident

C3.1.9.4 Timetable for measuring compliance with service level requirements

In order to respect the Contractor's initial mobilization period, compliance with the service levels will be introduced gradually as shown in the TABLE C3.1.9/4 below:

TABLE C3.1.9/4: TIMETABLE FOR COMPLIANCE WITH SERVICE LEVEL REQUIREMENTS

Contract Month	**Road Safety** Minimum compliance required on % of contract road	**Durability** Minimum compliance required on % of contract road
1	50	0
2	100	35
3	100	70
4	100	100
5	100	100
6 until end of Contract	100	100

C3.1.10 MANAGEMENT OF THE ENVIRONMENT

The Contractor shall be responsible for construction according to an Environmental Management Plan in terms of Section C3.3 of the Scope of Work.

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 C3.3 of the Scope of Work. Where the Contractor fails to adhere to these requirements, the specifications in Section C3.3 provide the methodology and cost liability of the remedy.

C3.1.11 TARGETED PROCUREMENT PROCEDURE

Gauteng Department of Roads and Transport is committed to the implementation of Government's policies and in turn expects the same from its contractors. To comply with the objectives of the Preferential Procurement Regulations, 2017, Gauteng Department of Roads and Transport will utilise its targeted procurement procedure, which is the process used to create a demand for the services and supplies of, or to secure the participation of, targeted enterprises and targeted labour in contracts.

Accordingly, it is a requirement of this project that the tenderer is familiar with the specifications (section 9(2) (b-h) in the PPR Regulations 2017) that relate to subcontracting a minimum of 30% of the operational section to:

(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 are youth;
(iv) An EME or QSE which is at least 51% owned by black people who are women;
(v) An EME or QSE which is at least 51% owned by black people with disabilities;
(vi) An EME or QSE which is 51% owned by black people living in rural or underdeveloped 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 are military veterans; or
(ix) More than one of these categories referred to in paragraph (i) to (viii)

Further to, tenders shall;

(x) provide mentoring, guidance and assistance to EME or QSE;
(xi) arrangement of engineering skills, entrepreneurial skills and generic skills training programmes, for which provision has been made in the Bill of Quantities; and active participation with community-based structures

In this regard, Section C3.4 of the Scope of Work covers the Contractor’s requirements in detail, as well as defining the procurements targets

C3.1.12 OCCUPATIONAL HEALTH AND SAFETY

In terms of the Construction Regulation 5(1)(b), 2014 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), the Gauteng Dept of Roads and Transport, as the Employer, is required to compile a specification on health and safety for the project. Section C3.5 of the Scope of Work contains the specification that regulates the Contractor’s construction methods to ensure health and safety of his employees, subContractors and the public.

C3.1.13 CHANGES TO SCOPE OF WORK

It is a condition of this contract that the Employer reserves the right to limit the total expenditure on the Works due to possible budget constraints. Should the tender sum exceed the budgeted amount, the scope of the works may be reduced at any time before or during the contract period to ensure that the final contract amount does not exceed the budgeted amount. Reference is made to the particular specification M0208 (i) in Section 3.2 of the Scope of Work.

C3.2 PARTICULAR SPECIFICATIONS

The Standard Specifications for Routine Road Maintenance, October 2001, as amended by particular specifications, shall apply to this contract. The particular specifications comprise standard and particular amendments issued by the Gauteng Dept of Roads and Transport , and are set out in this section.

C3.2.1 STANDARD AMENDMENTS TO THE STANDARD SPECIFICATIONS

The following standard amendments shall apply.

Section No Clause No or Item No	Amendment
M0200	*Substitute* "Bill of Quantities" for "Schedule of Quantities" *throughout the Standard Specifications.*
M0204	*Insert the following as the first paragraph* "In terms of sub-clause 4.9 of the FIDIC Conditions of Contract for Construction, 1999 the Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the contract. The Contractor shall submit the quality assurance system he proposes using, to the Engineer for his approval, within two weeks of the Commencement Date. 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. The Engineer shall audit any aspect of the Contractor's quality assurance system. Should the Contractor fail in any aspect of his quality assurance system, he will be penalised by the amount specified in the Scope of Work per incident."
M0208 (f)	*At the end of the third paragraph add* "If the work is executed using rates from the daywork schedule, then the sum for overhead charges and profit in terms of subclause 13.5 (b)(ii) is not applicable."
M0221	*In the heading of the clause amend* "ABE" *to* "SMME".
M0402 (b)	*Replace the first paragraph with* "The route patrol service will be provided by a route patrol team consisting of the patrol vehicle, equipment and personnel. The minimum requirements in respect of the patrol vehicle, equipment and personnel to be supplied by the Contractor, are as follows:"
M0502 (b) (iii)	Move paragraphs 3, 4, 5 and 6 and insert them as paragraphs 2, 3, 4 and 5 as part of sub-clause (i) General Duties.
M0502 (o)	*Insert the following as the second paragraph*: “Penalties shall be applied where temporary road signs have been left in place and are not applicable. The penalty as specified in the Scope of Work is applicable.”
M3203	*Add the following paragraph to section M3203:* “Inspection of Collection and Removal of Debris and Litter for Payment: Inspection for the collection and removal of debris and litter will be undertaken after a clearing operation. If the clearing operation does not comply with the acceptance criteria, then for each incident of non-compliance the penalty as specified in the Scope of Work is applicable.”

M4304 Move the fifth paragraph in Section M4611 and insert it as the fourth paragraph in Section M4304.

M6102 *Add to sub-item (a) the sub-item:*

"(vi) Designated areas

The shoulder mow includes the designated areas as defined in sub-clause (c) below."

Add to sub-item (c) "The designated areas form part of the shoulder and general mowing operations, when these are executed."

M6402 (c) (ix) *Replace* "yellow line on the outside shoulder*" with* "edge of surfacing".

M6402 (c) *Add the sub-item* "(x) Shrubs shall not be planted closer than 7m from the edge of surfacing, unless otherwise instructed by the Engineer."

TABLE M7102/1 *Delete* "1 ton LDV with pushbars, cage-work and ramp and " *in row 1.*

M720.01 *Amend sub-item (a) to* "Accident restoration and clearing of spillages". *Omit sub-item (b) and re-number (c), (d) and (e) to (b), (c) and (d).*

DWG 3 *Add as a note* "The designated areas are part of the shoulder mow."

DWG5 *Add as a note* "The areas forming part of items M620.01 and M620.02 are specified in the Scope of Work".

C3.2.2 PARTICULAR AMENDMENTS TO THE STANDARD SPECIFICATIONS

In certain clauses the Standard Specifications allow a choice to be specified in the Scope of Work between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this contract are contained in this section of the Scope of Work. It also contains some additional specifications required for this particular contract.

The number of each clause and each payment item in this section of the Scope of Work 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.

BM0208 PAYMENT

Insert the following sub-clauses:

"(g) Payment Certificates

With reference to sub-clause 14.3 and 14.6 of the FIDIC Conditions of Contract for Construction (1999), the Contractor must submit his Payment Certificate each month in the format as prescribed by the Employer, which is an electronic data capturing programme called MaintCost. Any cost arising from the use of the programme, cost of duplicating and delivering copies of the certificate to the Engineer and the Employer shall be borne by the Contractor. The Engineer and the Employer require a total of one (1) original and two (2) sets of A4-sized paper copies. This programme will be used at the Contractor's own risk.

(h) Rates to remain unchanged

Dependent on the rates and prices offered in the Bill of Quantities, the Employer intends to increase or reduce the scope of work to match the budget allowed for this project. The value of such increase or reduction in the scope of works shall not give cause for the Contractor to vary the offered rates and prices, which shall remain final and binding for the duration of the contract."

SECTION M0300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

BM0302 GENERAL REQUIREMENTS

Amend the sub clause (b) to read as follow:

"(b) Office for the Engineer

The Contractor will provide the Engineer with office space (about 45m²) and carports for three staff members as well as a conference room, kitchen and toilets at the Contractor's campsite or offices. The offices shall be constructed from timber, fibre-cement or other approved material. The office shall have double walls filled with insulating material and lined on the inside with timber or other approved material. Ceilings shall be provided for the office building. The office building shall have timber floors or concrete floors with vinyl floor tiles. Window areas of the office shall be at least equal to 25% of the floor area. The office shall be provided with approved burglar proofing.

The office building shall be painted with an approved paint after erection. The paint work shall be maintained during the contract period.

The doors shall be equipped with a lock and two keys.

The siting and orientation of the office shall be to the Engineer's satisfaction and shall be decided on in consultation with the Engineer and confirmed in writing before erection. The office shall be provided with 220 volt electricity.

The clear height of all offices between floor and ceiling shall be 2,4m minimum. All windows shall be of the type that can open over the full window area. The Contractor shall provide and install all office furniture (i.e. desks, chairs, steel filing cabinets etc.) for three staff members over the full duration of the contract to the satisfaction of the Engineer.

The Contractor shall provide and install an air-conditioning units for the offices. The airconditioning units shall be of the electrically operated compressor type with closed circuit and not of the evaporation type. The capacity of the air-conditioning unit shall be at least 2,2kW. The number of air conditioning units shall be enough to cover the entire office area.

The Contractor shall construct four carports for the Engineer's staff to protect the Engineer's staff vehicles at all times against the direct rays of the sun. The carports shall be at least 20m² in area and the floor shall consist of a layer of broken stone to alleviate dusty and muddy conditions. The carport shall be at least 3m wide and shall have headroom of at least 2m. The roof of the carport shall be waterproof.

The Contractor shall be responsible for the provision, initial cost as well as the monthly usage cost of electricity, water, sewerage, telephone lines, fax lines and internet connections.

The office and carport shall meet with the approval of the Engineer."

BM0303 MEASUREMENT AND PAYMENT

Amend item numbers "M030.01*" and* "M030.02*" to read as item numbers* "BM030.01" *and* "BM030.02" *and add the following to the description of the measurement and payment for these items:*

“The tendered lump sum shall not include any fixed obligation costs for the subcontracts involving SMME.”

Replace item number "M030.03*" with "*BM030.03” *as follows:*

"BM030.03 Time-related obligations

(a) General obligations ..... month

(b) Occupational health and safety obligations ..... month

The tendered rate per month represents full compensation for that part of the Contractor’s obligations, which are mainly a function of time. The tendered sum will be paid monthly, pro rata for parts of a month, until the end of the period for completion of the works plus any extension thereof.

The tendered rate per month for sub-item BM030.03 (a) represents full compensation for that part of the Contractor’s general obligations, i.e. the insurance and indemnities required in terms of the FIDIC Conditions of Contract for Construction, 1999 and all other obligations, excluding occupational health and safety. The tendered rate per month shall include full compensation for all the Contractor’s costs arising from subletting to SMME including, but not limited to, the provision of supervision, assistance required in terms of the specifications, and the administration of the subcontracts. It shall not include any costs of the Contractor for the coaching, guidance and mentoring of SMME. The tendered rate per month shall not include any costs for the time-related obligations of the subcontracts involving SMME.

The tendered rate per month for sub-item BM030.03 (b) represents full compensation for that part of the Contractor’s health and safety obligations.”

SECTION M0400: ROUTE PATROL SERVICE

BM0402 GENERAL REQUIREMENTS

Amend the first paragraph to read as follows:

"The Contractor shall provide a route patrol service along the entire site as specified. On dual carriageway roads, each carriageway shall be travelled three times a day (8 hour cycles) along its full extent, and shall include the ramps and crossroads."

(b) Route patrol vehicle, equipment and personnel

The minimum requirements in respect of vehicles and equipment to be supplied by the Contractor are:

Amend paragraph (i) to read as follow:

"(i) Patrol vehicle

The route patrol vehicle shall be a LDV (± 1 ton) driven by a competent driver capable of providing a high standard of service according to the requirements. The vehicle shall be able to seat three people and contain a cellular telephone, road maps, 9kg fire extinguisher, and be fitted with a hazard light with a minimum intensity of 100W. The words "(route no) ROUTE PATROL", 250mm in height, shall be written in letters clearly legible during both daylight and night on both sides of the LDV. Patrol vehicles will be uniformly marked with reflective markings as indicated by the Engineer."

Add the following to the list in (ii)

"(ii) Route patrol equipment

The route patrol vehicle will carry the following minimum equipment items:

(xii) Medical Aid Kit

Amend paragraph (iii) to read as follow:

"(iii) Route patrol personnel

The personnel used to man the route patrol vehicle shall be well equipped and trained to undertake all the route patrol service duties as specified.

The patrol team will consist of the leader plus two (2) labourers for assistance. One of these personnel members must be trained as a Level 1 First Aider with a valid First Aid certificate."

Amend paragraph (c) to read as follow:

"(c) Reporting of daily records

The route patrol service shall use Global Positioning Systems (GPS) to record his activities and positions. The route patrol service will record its position every half hour on the GPS as well as every activity or incident. This information will be submitted electronically daily to the Engineer.

The Contractor shall submit to the Engineer daily records of any damage to the road network and work executed by the route patrol services. The records shall include information such as the description of damage, location, measurements where applicable and all other information the

Engineer may require for record purposes as well as timesheets of all activities and work executed by the route patrol services.

If the Contractor fails to comply with the specifications and duties set out for the route patrol services or fails to supply the service for a period of time, the Contractor will be penalised as specified in the Project Specifications."

BM0403 MEASUREMENT AND PAYMENT

Amend item "M040.01*" to read as* "BM040.01*" and amend item BM040.01 as follows:*

"Item Unit

BM040.01 Route patrol service per team (including LDV and equipment) ..... month

The rate tendered per month shall include, per team, full compensation for providing the service specified for weekdays, weekends and public holidays on a 24 hour basis including the labour, equipment required and costs associated with the disposal of the foreign articles as specified in this section. The tendered rate shall also provide for all reporting, notifications and follow up of relevant incidents, and keeping of records thereof."

SECTION M0500: ACCOMMODATION OF TRAFFIC

BM0502 GENERAL REQUIREMENTS

Under sub-paragraph (a) add the following paragraphs:

"The Contractor will not be responsible for the provision of temporary road signs for work undertaken by specialist subContractors *inter alia* road marking, mill and replace repairs, and repairs to structures, as the provision of temporary road signs will be included as part of the scope of work in the subcontracts. In addition, the Contractor may be required to provide temporary road signs for visual inspections, materials testing and survey work, but payment for this will be made from dayworks."

"A truck mounted attenuator shall be used for all lane closures, with the exception of slow shoulder closures, and remain in the closed off area to provide protection for the maintenance team for the full duration of the closure."

Add the following to paragraph (b) (i)

"The Traffic Safety Officer should have training in the OH&S Act, hazardous materials and the clean up thereof, traffic safety and traffic accommodation. He is required to be on site full-time and be on standby after hours. The approval of the safety officer is at the discretion of the Engineer."

Add the following paragraph (h) (v)

"(p) Truck Mounted Attenuator (TMA)

The truck-mounted attenuator (Alpha 70K TMA or similar) must comply with NCHRP 350's test level 2. It must be able to decelerate and stop light and heavy weight vehicles (820 and 2000kg) when the rear of the cartridge is impacted head-on at 70km/h."

BM0503 MEASUREMENT AND PAYMENT

Replace item M050.03 with BM050.03 as follows:

"Item Unit

BM050.03 Accommodation of traffic and maintaining temporary deviations

(a) Work undertaken by Contractor ..... month
(specify section and interchanges)

The tendered rate shall include full compensation for all costs associated with the accommodation of traffic and maintaining temporary deviations and shall include work constructed and paid under Section M9100. The tendered rate shall also include full compensation for the provision of a full-time Traffic Safety Officer and for all the duties performed by the Traffic Safety Officer. The tendered rate shall also include full compensation for the provision of communication equipment required for regulating the traffic, arranging for the moving of services, solving traffic problems, complying with the legal requirements of all authorities concerned, for providing temporary access to private property, and for the provision and maintenance of temporary drainage. The tendered rate shall also include any cost associated with the provision of flagmen."

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Add new items BM050.04 and item BM 050.05 as follows:

"Item Unit

BM050.04 Supply and use of truck mounted attenuator ..... Month
(specify section and interchanges)

The unit of measurement will be the month for the duration of the contract. The tendered rate shall include full compensation for the procurement, installation to a specified truck and the use of a truck-mounted attenuator for all traffic accommodation.

Item Unit

BM050.05 Additional lane closures ..... Number (No)

The unit of measurement will be the number of additional lane closures, regardless of the lane position, as requested by the Engineer."

SECTION M1100: PAVEMENT LAYER REPAIRS

BM1101 SCOPE

Add the following as fifth paragraph:

"All pavement layer repairs larger than 50m^2 will be done by approved milling and paving equipment."

BM1102 EXECUTION OF WORK

Add the following to paragraph (b) (iii)

"Where required, the backfilling of asphaltic layers shall be done with approved paving equipment. The paver shall be an approved type of selfpropelled mechanical spreader and finisher capable of laying to the required widths, thicknesses, profile, camber or cross-fall, without causing segregation, dragging or other surface defects.

All pavers shall be fitted with automatic electronic screed controls to maintain the required levels, cambers and cross-falls.

Where levelling beams on multiple skids or sliding beams are used they shall be at least 12,0 m long, or as specified by the Engineer."

Revise sub-clause M1102 (b) (iii) the 12th paragraph to read as follow:

"The Contractor shall utilise a calibrated nuclear gauge or cores taken from the compacted layer for the process control during compaction operations. Notwithstanding this requirement, the Engineer may, at his own discretion, carry out his own acceptance control as required".

BM1104 EQUIPMENT

Amend paragraph seven to read as follow:

"Approved milling machine and paving equipment if required"

BM1106 MEASUREMENT AND PAYMENT

Amend item number M110.03 to BM110.03 and add the following sub-item to sub-item (b):

"(iv) Extra over sub-items (b) (i), (ii) and (iii) ..... cubic metre (m^3) for importing crushed stone."

Add the following to the third paragraph: ",for the material excavated from the existing pavement and re-used for backfilling."

Replace the fourth paragraph with the following:

"The tendered rate for emulsion-treated crushed stone for sub-items (b) (i), (ii) and (iii) shall include full compensation for re-using the crushed stone excavated from the existing pavement, and for providing, applying and mixing the stabilising agents. The tendered rate for sub-item (b) (iv) shall include full compensation for procuring and supplying imported crushed stone for backfilling."

Add new items BM110.08 and BM110.09:

"Item Unit

BM110.08 Establishment of Milling Machine on site ..... Number (No)

The unit of measurement shall be the number of times establishment were done on site.

The use of a milling machine on site will be deemed necessary for the milling of areas larger than 50m^2. All movement of a milling machine on site is for the Contractor's own account.

"Item Unit

BM110.09 Establishment of Paver on site ..... Number (No)

The unit of measurement shall be the number of times establishment were done on site.

The use of a paver on site will be deemed necessary for the paving of areas larger than 50m^2. All movement of a paver on site is for the Contractor's own account."

SECTION BM1200: REPAIR OF POTHOLES, EDGE BREAKS AND SURFACE FAILURES

BM1203 ACCEPTANCE CRITERIA

Replace subclause (b) with the following:

"(b) Acceptance criteria

The minimum standard on potholes, edge breaks and surface failures is:

Potholes: Not more than 2 potholes with a diameter greater than 100 mm on any continuous 10 km of carriageway length.

Edge breaks: No greater than 5 metres of edge breaks per km of carriageway length where width of seal loss exceeds 100mm.

Surface failures: Not more than 2 surface failures on any continuous 10km of carriageway length."

BM1205 MATERIAL

Amend paragraph to read as follow:

"The temporary repair of potholes, edge breaks and surface failures will be by means of a polymer modified, cold premixed, bituminous mixture or a product approved by the Engineer.

All other material used for potholes, edge breaks and surface failures shall be as specified in section M1100: Pavement Layer Repairs and section M1600: Surface Treatment of Surfaced Roads."

BM1206 MEASUREMENT AND PAYMENT

Amend item numbers "M120.01, M121.01 and M122.01" *to read* "BM120.01, BM121.01 *and* BM122.01", *and amend the unit of measurement to* "month".

Item	Unit
BM120.01 Repair of potholes (All sections)	Month
BM121.01 Repair of edge breaks (All sections)	Month
BM122.01 Repair of surface failures (All sections)	Month

The tendered rate is per month and shall include full compensation for all labour, equipment, transport and material required as specified for pothole, edge breaks and surface failure repaired, irrespective of the location and size.

The tendered rate shall include full compensation for compacting the floor, trimming the edges of the existing surface, procuring, furnishing and mixing all materials and compacting and trimming the asphalt to the required lines and levels. It shall also include full compensation for applying a tack coat of emulsion to the surface to be treated.

SECTION M1300: CRACK SEALING

BM1307 MEASUREMENT AND PAYMENT

Amend the following item:

"Item Unit

BM132.01 Crack sealing per individual item

(b) Priming of cracks (MSP1 or similar) ..... litre (ℓ)
(c) Sealant (hot applied sealant) ..... litre (ℓ)

Amend the unit of measurement to the litre of sealant used for the sealing of cracks."

SECTION BM1500: CRACK AND JOINT SEALING OF CONCRETE PAVEMENTS

BM1505 MEASUREMENT AND PAYMENT

Add the following item:

Item Unit

BM150.02 Small repairs to existing concrete pavements

(a) Provisional sum for the repairs to existing concrete pavements . Provisional ……..sum (prov sum)

(b) The Contractor's overhead charges and profit in connection with providing the service .....percentage (%)

The provisional sum items shall be paid for in accordance with the provision of the FIDIC General Conditions of Contract for Construction, 1999.

The tendered percentage for provisional sum items is a percentage of the amount actually spent, which shall include full compensation for the overhead costs of the Contractor, and the profit in connection with providing the service."

SECTION BM1700: REPAIR OF SLOPE FAILURES AND WASHAWAYS

BM1705 MEASUREMENT AND PAYMENT

Add the following item:

"Item Unit

BM170.05 Repair of slope failures and washaways

(a) Provisional sum for the repairs of slope failures and washaways ..... Provisional Sum (prov sum)

(b) The Contractor's overhead charges and profit in respect of sub-item BM170.05 (a) ..... percentage (%)

The provisional sum items shall be paid for in accordance with the provision of the FIDIC General Conditions of Contract for Construction, 1999.

The tendered percentage for provisional sum items is a percentage of the amount actually spent, which shall include full compensation for the overhead costs of the Contractor, and the profit in connection with providing the service."

SECTION BM2100: REPAIR AND MAINTENANCE OF INLET AND OUTLET STRUCTURES

BM2104 MATERIALS

Amend paragraph (d) to read as follow:

"(d) Manhole covers, grid inlets, *inter alia*

Manhole covers and frames, grid inlets and other accessories shall be supplied and/or manufactured in accordance with the details shown on the drawings or as instructed by the Engineer."

BM2105 MEASUREMENT AND PAYMENT

Add the following sub- items:

"Item Unit

BM210.03 Reconstruction of inlet and outlet structures

(d) Pre-cast concrete inlet frames, ... No
(As specified by the Engineer)

The unit of measurement shall be the number of inlet frames installed. Pre-cast concrete inlet frames will be manufactured and installed as per the drawing supplied by the Engineer. Grids and frames will be manufactured and installed as per drawing N-19-v1.

The tendered rates shall include full compensation for procuring all material and all work necessary for constructing the structures to the authorised dimensions. In the case of concrete work the tendered rate shall include for providing and erecting the formwork and for benching the inverts.

The procurement of pre-cast frames and grids will be done under item BM210.04."

Amend item numbers "M210.04" *to read* "BM210.04".

"Item Unit

BM210.04 Accessories

(a) Provisional sum for the cost of accessories ..... Provisional sum (Prov Sum)

(b) The Contractor's overhead charges and profit
in connection with providing the service ..... percentage (%)

The provisional sum items shall include full compensation for procuring all pre-cast manhole covers and frames, grid inlets and other accessories as approved by the Engineer.

The provisional sum items shall be paid for in accordance with the provision of the FIDIC General Conditions of Contract for Construction, 1999.

The tendered percentage for provisional sum items is a percentage of the amount actually spent, which shall include full compensation for the overhead costs of the Contractor, and the profit in connection with providing the service."

SECTION M2300: CLEANING OF WATERWAY STRUCTURES

Amend the standard specification as follows:

"M2303 ACCEPTANCE CRITERIA

Cleaning of waterway structures

The waterway structures shall be kept clean, not allowing more than 20% of vertical height to be filled with silt or debris at any position of the waterway structures or at the inlet and outlet areas of the waterway structures.

BM2304 INSPECTION OF WATERWAY STRUCTURES FOR PAYMENT

Cleaning of waterway structures

Inspection for the cleaning will be based on the following:

- Inspection of the waterway structures will be done on a random basis at any time during the month.
- The positions of inspections will be chosen randomly by the Engineer.
- If one waterway structure does not comply with the acceptance criteria, that structure fails.
- There will be no inspection for 3 days after it has rained in the catchment area of the structure.
- The Contractor will be penalised by the number of failed structures multiplied by the penalty amount as specified in the Project Specifications for not complying with the specifications.

BM2305 MEASUREMENT AND PAYMENT

Add the following items:

"Item Unit

BM230.01 Cleaning of waterway structures, inlet and outlet areas

(a) Cleaning of waterway structures, ... month inlet and outlet areas

The tendered rate per month shall include full compensation for removing the material and vegetation from the waterway structures, inlet and outlet areas for loading the material onto trucks, for transporting the material and spoiling the material as specified. Overhaul must be included in the rate and there will be no extra payment for overhaul in excess of the free haul distance."

SECTION M2400: CLEANING OF PREFABRICATED CULVERTS

Amend the standard specification as follows:

"M2404 INSPECTION OF PREFABRICATED CULVERTS FOR PAYMENT

Cleaning of prefabricated culverts

Inspection for the cleaning will be based on the following:

- Inspection of the prefabricated culverts will be done on a random basis at any time during the month.
- The positions of inspections will be chosen randomly by the Engineer.
- If one prefabricated culvert does not comply with the acceptance criteria, that structure fails.
- There will be no inspection for 3 days after it has rained in the catchment area of the structure.
- The Contractor will be penalised by the number of failed structures multiplied by the penalty amount as specified in the Project Specifications for not complying with the specifications."

SECTION M2500: CLEANING OF CONCRETE DRAINS AND CHANNELS

BM2501 SCOPE

Add the following after the first paragraph:

"Both hand cleaning and mechanical vacuum road sweepers will be used for the cleaning of concrete drains and channels."

M2502 EXECUTION OF WORK

Add the following after the sixth paragraph:

"Hand cleaning will only be used in areas where mechanical vacuum road sweepers cannot operate.

The mechanical vacuum road sweeper or similar shall be a self propelled vehicle or truck mounted, that must be equipped with a centre broom and side brooms that will allow the sweeper to sweep against kerbs and concrete barriers with the flow of traffic. The sweeper shall also be equipped with spray bars to dampen the road surface to control dust while sweeping. The sweeper shall have a storage capacity in excess of 4.5m^3. All material swept from concrete drains and channels shall be spoilt at approved dump sites.

Work completed by the mechanical vacuum road sweeper may be executed during the day or at night time. Refer to Table C3.1.9/2 for the restrictions on maintenance activities."

*Amend the standard specification as follow*s:

"BM2504 INSPECTION OF CONCRETE DRAINS AND CHANNELS FOR PAYMENT

Cleaning of concrete drains and channels

Inspection for the cleaning will be based on the following:

- Inspection of the concrete drains and channels will be done on a random basis at any time during the month.
- The positions of inspections will be chosen randomly by the Engineer.
- If one concrete drain and channel do not comply with the acceptance criteria, that drain or channel fails.
- There will be no inspection for 3 days after it has rained in the catchment area of the structure.
- The Contractor will be penalised by the number of failed structures multiplied by the penalty amount as specified in the Project Specifications for not complying with the specifications."

BM2505 MEASUREMENT AND PAYMENT

Amend item number "M250.01" to "BM250.01" and add to the first paragraph of item BM250.01 "and for sweeping by means of hand or mechanical vacuum road sweeper the concrete drains and channels to remove silt, loose vegetation and debris."

BM2500 CLEANING OF CONCRETE DRAINS AND CHANNELS

Replace Item M250.02 with BM250.01 as follows:

"Item Unit

BM250.01 Cleaning of concrete drainage channels

(i) Hand cleaning month
(ii) Mechanical vacuum road sweeper ..... km

(b) Extra over item BM250.01 (ii) for work during night time ..... percentage (%)

The tendered rate under item (i) is per month and shall include full compensation for all labour and equipment required for removing the material from channels irrespective of the depth of silt and debris and for loading, off-loading and spreading when material removed is intended for spoiling at approved spoil sites.

The tendered rate under item (ii) is the kilometre swept by the mechanical vacuum road sweeper and shall include full compensation for all labour and equipment required for sweeping the material from channels and for loading, off-loading and spoiling at approved spoil sites.

The tendered rate under item (b) is the extra over percentage for work done at night time by the mechanical vacuum road sweeper and shall include full compensation for all labour and equipment required for sweeping the material from channels and for loading, off-loading and spoiling at approved spoil sites. Night work shall only be done on the instruction of the Engineer.

The tendered rates shall also include for transporting the excavated material to approved spoil sites in excess of the free haul distance.

Where material is disposed of adjacent to the channels, the tendered rate shall include full compensation for removing the material from the channels, irrespective of the depth of silt and debris, spoiling and spreading the material adjacent to the channel where it cannot be washed back into the channel."

Replace Item M250.02 with BM250.02 as follows:

"Item Unit

"BM250.02 Additional cleaning of concrete drainage channels

(a) Machine cleaning ..... hour (h)

The unit of measurement shall be the hour of additional cleaning of concrete drainage channels or emergency clean-ups as specified on instruction of the Engineer, by means of machine sweeping operations.

The tendered rate shall include full compensation for all labour and equipment required for removing the material from the drainage channels irrespective of the depth of silt and debris, and for loading, off-loading and spreading when material removed is intended for spoiling at approved spoil sites. The tendered rates shall also include for transporting the excavated material to approved spoil sites in excess of the free-haul distance.

Where material is disposed of adjacent to the drainage channels, the tendered rate shall include full compensation for all labour and equipment required for removing the material from the drainage channels irrespective of the depth of silt and debris, spoiling and spreading the material adjacent to the drainage channels where it cannot be washed back into the channel."

SECTION M2700: EDGE BUILD-UP REMOVAL

Amend the standard specification as follows:

"BM2704 INSPECTION OF EDGE BUILD-UPS FOR PAYMENT

Inspection for edge build-up will be based on the following:

- Inspection of edge build-up will be done on a random basis at any time during the month.
- The positions of inspections will be chosen randomly by the Engineer.
- If one area of edge build-up do not comply with the acceptance criteria, that area fails.
- The Contractor will be penalised by the number of failed areas multiplied by the penalty amount as specified in the Project Specifications for not complying with the specifications."

SECTION M3100: FENCING

M3101 SCOPE

Add the following new item:

Item	Unit

BM310.11 Procurement and erection of specialised fencing

(a) Procurement and erection of specialised fencing ..... provisional sum (Prov Sum)

(b) The Contractor's overhead charges and profit ..... percentage (%) in respect of sub-item M310.11(a)

The unit of measurement for sub-item M310.12 (a) shall be the amounts actually paid for the procurement and erection of materials and shall be made in accordance with the provisions of FIDIC Conditions of Contract for Construction, 1999.

The percentages tendered for sub-item BM310.11 (b) shall be the percentage of the amounts actually paid for the procurement and erection of materials as ordered under subitem M310.11 (a) and shall be in full and final compensation in respect of the Contractor's handling costs, profit and all other charges in connection with the procurement and supply of the materials to the point of usage.

SECTION M3200: COLLECTION AND REMOVAL OF DEBRIS AND LITTER

Amend the standard specification as follows:

"BM3205 INSPECTION OF DEBRIS AND LITTER FOR PAYMENT

Inspection for debris and litter will be based on the following:

- Inspection of debris and litter will be done on a random basis at any time during the month while the Contractor's workers are picking up the litter.
- The inspection areas and days chosen will be those where the removal of debris and litter by the Contractor is taking place.
- If one area of debris and litter do not comply with the acceptance criteria, that area fails.
- The Contractor will be penalised by the number of failed areas multiplied by the penalty amount as specified in the Project Specifications (Table C3.1.9/2) for not complying with the specifications."

BM4107 MEASUREMENT AND PAYMENT

Amend item number M410.02 to BM410.02 and replace the third paragraph with:

"The tendered rates shall include full compensation for supplying and erecting the road sign supports, including all bolts, screws, rivets, welding and accessories, together with the painting and galvanising required, and the provision and treatment of breakaway holes in timber supports."

Replace Item M410.03 with BM410.03 as follows:

"BM410.03 Reference marker boards

(a) Reference marker board and post .....number (No)

(b) Reference marker board ..... number (No)

The unit of measurement for sub-item BM410.03 (a) shall be the number of reference marker boards including posts supplied and erected in accordance with the drawings. The tendered rate shall include full compensation for procuring and furnishing the reference marker boards and posts, and for all labour, excavation, backfilling with soil or concrete as may be necessary for completing the work in accordance with the details shown on the drawings.

Sub-item BM410.03 (b) is for the provision of the reference marker board only excluding a post, where boards are missing or old boards only are to be replaced. The unit of measurement for sub-item BM410.03 (b) shall be the number of reference marker boards only supplied and erected in accordance with the drawings. The tendered rate shall include full compensation for procuring and furnishing the reference marker boards only with bolts and nuts, and for all labour, as may be necessary for completing the work in accordance with the details shown on the drawings, and disposal of old material."

Replace Item M410.10 with BM410.10 as follows:

M410.10 Hazard plates

(a) W401 sign (150 x 600mm)

(i) Sign only ..... number (No)
(ii) Post only ..... number (No)

(b) W401 sign (200 x 800mm)

(i) Sign only ..... number (No)
(ii) Post only ..... number (No)

(c) W401 sign (300 x 1200mm)

(i) Sign only ..... number (No)
(ii) Post only ..... number (No)

The unit of measurement in each subgroup shall be the number supplied and erected in accordance with the drawings.

The tendered rate shall include full compensation for procuring and furnishing the hazard plates and posts (as applicable), excavating, disposing of excavated material (including overhaul), erecting and for placing and compacting the soilcrete backfilling."

Add the following item:

Item		Unit
BM410.17	Extra over item for work during night time	percentage (%)

The tendered rate under item BM410.17 is the extra over percentage for all work (labour content only) related to Section M4100 and carried out during night time on the instruction of the Engineer."

SECTION M4200: ROAD SIGN CLEANING AND REMOVAL OF ILLEGAL SIGNS

BM4204 MEASUREMENT AND PAYMENT

Amend standard specification as follows:

BM4210 REMOVAL OF ILLEGAL SIGNS

Item	Unit
BM421.01 Removal of illegal signs	number (No)
(a) Signs within the road reserve:	
(i) Exceeding 0,5 m but not 2 m^2	number (No)
(ii) Exceeding 2 m^2 but not 6 m^2	number (No)
(iii) Exceeding 6 m^2	number (No)

The unit of measurement for sub-item BM421.01 (a) shall be the number of illegal road signs removed on instruction of the Engineer in each size category.

The tendered rate shall include full compensation for all labour, equipment, transport and overheads necessary for removal of the illegal signs."

SECTION M4400: GUARD-RAIL ERECTION AND MAINTENANCE

BM4406 MEASUREMENT AND PAYMENT

M4400 GUARD-RAIL ERECTION AND MAINTENANCE

Amend item number "M440.06" *to* "BM440.06" *and add the following to item BM440.06:*

"Item Unit

BM440.06 Removal of damaged guard-rails and re-erection of guard-rails with new, recovered or renovated material

(a) Guard-rails

(i) Conventional guardrail (3.8 m eff. length) ..... metre (m)
(ii) EU standard guardrail (4.0 m eff. length) ..... metre (m)

(b) End wings

(i) Conventional guardrail (3.8 m eff. length) ..... number (No)
(ii) EU standard guardrail (4.0 m eff. length) ..... number (No)

(c) Terminal sections with single guard-rails

(i) Conventional guardrail (3.8 m eff. length) ..... number (No)
(ii) EU standard guardrail (4.0 m eff. length) ..... number (No)

(d) Terminal sections with double guard-rails

(i) Conventional guardrail (3.8 m eff. length) ..... number (No)
(ii) EU standard guardrail (4.0 m eff. length) ..... number (No)

(e) Guard-rail posts

(i) Conventional guardrail (wood) ..... number (No)
(ii) EU standard guardrail (sigma post) ..... number (No)

The unit of measurement for sub-item M440.06 (a) shall be the metre of effective length of guard-rails removed and re-erected including the post with spacer blocks, excavating, backfilling the post holes and removing any surplus excavated material.

The unit of measurement for sub-item M440.06 (b), (c) and (d) shall be the number of units removed and re-erected.

The tendered rate shall include full compensation for constructional equipment, labour and tools required to remove the items and re-erecting the guard-rails as specified with new, recovered or renovated material, including loading, transporting between any two points on the site and off-loading the material. The providing of new material shall be paid under item M440.08 and renovating material under M440.07.

The tendered rate shall also include for the loosening of bolts and the adjacent sections of guard-rails in order to adjust their position to accommodate the new or renovated sections of guard-rail.

The unit of measurement for subitem M440.06 (e) shall be the number of additional guard-rail posts erected in position and measured in place. The tendered rate shall include full compensation for furnishing and erecting guard-rail posts complete with spacer blocks, bolts, nuts, washers, and reinforcing plates.

The unit of measurement for sub-item BM440.06 (f) shall be the number of guardrail posts removed and re-erected in position including the spacer block. The tendered rate shall include full compensation for excavating and backfilling the post holes and removing any surplus excavated material."

Amend item number "M440.07" *to* "BM440.07" *and replace the first sentence of the first paragraph with:*

"The unit of measurement for sub-item BM440.07 (a) shall be the metre of guard-rail supplied complete with bolts, nuts, washers and reinforcing plates."

Amend item number "M440.08" *to* "BM440.08" *as follows*:

Item		Unit
BM440.08	Supply of new material required for the re-erection of guard-rails	
(a)	Guard-rails (galvanised)	
	(i) Conventional guardrail (3.8 m eff. length)	metre (m)
	(ii) EU standard guardrail (4.0 m eff. length)	metre (m)
(b)	Curved guard-rails	
	(i) Conventional guardrail (3.8 m eff. length)	metre (m)
	(ii) EU standard guardrail (4.0 m eff. length)	metre (m)
(c)	Timber post	number (No)
(d)	Steel posts	
	(i) Conventional guardrail (3.8 m eff. length)	number (No)
	(ii) EU standard guardrail (sigma post)	number (No)
(e)	Spacer blocks	
	(i) Conventional guardrail (3.8 m eff. length).....	number (No)
	(ii) EU standard guardrail (4.0 m eff. length)	number (No)
(f)	Guard-rail reflectors	number (No)
	(i) Type D3 (A)	number (No)
	(ii) Type D3 (B)	number (No)
(g)	End wings	
	(i) Conventional guardrail (3.8 m eff. length) .	number (No)
	(ii) EU standard guardrail (4.0 m eff. length)	number (No)
(h)	Terminal sections with single guard-rails	
	(i) Conventional guardrail (3.8 m eff. length)	number (No)
	(ii) EU standard guardrail (4.0 m eff. length)	number (No)

(i) Terminal sections with double guard-rails

(i) Conventional guardrail (3.8 cm eff. length) ..... number (No)
(ii) EU standard guardrail (4.0 m eff. length) ..... number (No)

The unit of measurement for sub-item M440.08 (a) and (b) shall be the metre of guard-rail provided, complete with posts, spacer blocks, bolts, nuts, washers and reinforcing plates measured in accordance with the measurements of the loose guard-rail.

The unit of measurement for sub-item M440.08 (c), (d), (e), (f) and (g) shall be the number of additional new items provided, respectively.

The unit of measurement for sub-item M440.08 (h) and (i) shall be the number of new units provided complete with posts, spacer blocks, bolts, nuts, washers and reinforcing plates.

The tendered rates shall include full compensation for supplying all material as specified."

Add the following new items:

"Item Unit

BM440.13 Painting of guardrails ..... Meter (m)

The unit of measurement will be the meter of guardrails painted. The tendered rate shall include full compensation for all labour, material and equipment required for the cleaning and painting (with an appropriate galvanised paint) of the guardrail.

Item Unit

BM440.14 Re-galvanising of guardrails ..... Meter (m)

The unit of measurement will be the meter of guardrail re-galvanised. The tendered rate shall include full compensation for all labour, material and equipment required for the hot dip re-galvanising of the guardrail.

Item Unit

BM440.15 Re-shaping of guardrails ..... Meter (m)

The unit of measurement will be the meter of guardrail re-shaped. Shaping will be done by the re-rolling of a guardrail to its original form and shape. The tendered rate shall include full compensation for all labour, material and equipment required for the re-shaping of the guardrail."

BM4613 MEASUREMENT AND PAYMENT

Amend items "M460.01 to M460.06" *to* "BM460.01 to BM460.06" *and add the following to item BM460.06*:

"Items BM460.01 to BM460.05 are payment items for small projects less than R50000,00 in value, whereas item BM460.06 is for road marking undertaken in one operation on a section of road with a value of at least R50000,00 on instruction of the Engineer."

SECTION M4700: MAINTENANCE OF LAYBYES AND REST AREAS

BM4704 MEASUREMENT AND PAYMENT

Add the following item

"Item Unit

BM470.02 Provision of refuse bins, gazebos, tables and chairs

(a) Provision of refuse bins ..... (Prov sum)

(b) The Contractor's overhead charges and profit in respect of sub-item BM230.02 (a) ..... percentage (%)

Measurement and payment shall be in accordance with the provisions of Subclause 13.5 of the FIDIC Conditions of Contract for Construction, 1999. The tendered percentage is a percentage of the amount actually spent under sub-item BM470.02 (a), which shall include full compensation for the overhead charges and profit of the Contractor.

SECTION M6100: CONTROLLING VEGETATION GROWTH: MOWING AND CUTTING

BM6102 EXECUTION OF WORK

(b) General mowing

Add the following to the sub-item:

"General mowing of areas inside the road reserve also includes the area under the fence line."

Amend the standard specification to read as follow:

(d) Requirements

The following shall apply for any mowing and cutting operation:

(i) The grass shall be mowed to a height of not less than 50mm and not more than 100mm measured above the surrounding ground level and removed. The period for completion of a general mow and a shoulder mow shall be 1 month.

Amend the standard specification to read as follow:

BM6103 ACCEPTANCE CRITERIA

(a) Designated areas

The height of the grass shall not be less than 50mm and not more that 100mm after the completion of the mowing operation. The area of each sight triangle, kilometre reference marker boards and road signs will be evaluated individually after the mowing operation. The Contractor will not be allowed more than 2 of the abovementioned areas in any 3km section of road inspected for non-compliance with the above.

(b) General and shoulder mowing

Vegetation cut shall not be less than 50mm and not more that 100mm after the completion of the mowing operation. Mowing shall be done evenly without abrupt changes or breaks at and within the period specified. Areas shall be left neat and tidy with all vegetation cutting removed.

BM6105 INSPECTION OF MOWING FOR PAYMENT

Delete the entire item

BM6106 MEASUREMENT AND PAYMENT

Amend items "M610.01" and "M610.02" to read as items "BM610.01" *and* "BM610.02" *and replace them with the following items:*

"Item — Unit

BM610.01 Shoulder mowing including designated areas and removal of grass cuttings

(a) Reserve with dual carriageway ..... number (no)

(b) Reserve with single carriageway ..... number (no)

The unit of measurement shall be the number of mowing operations per section as specified.

“Item Unit

BM610.02 General mowing and removal of grass cuttings

(a) Reserve with dual carriageway ..... number (no)

(b) Reserve with single carriageway..... number (no)

The unit of measurement shall be the number of mowing operations per section as specified.

BM6110 GRASS CUTTING DESIGNATED AREAS

Replace Item M611.01 with BM611.01 as follows:

“Item Unit

BM 611.01 Cutting of designated areas

(a) Sight triangles at intersections, road signs and marker boards ..... (km)

The unit of measurement shall be the number of kilometres cut as specified.

The tendered rate shall include full compensation for furnishing all equipment and labour for each mow and removal operation, regardless of the quantities, or whether the grass is cut by machine or manual labour, and shall include all costs for picking up and disposal of grass cuttings as specified.

No separate payment will be made for cutting areas on steep or rocky slopes.”

SECTION M6200: CHEMICAL CONTROL OF VEGETATION AND ERADICATION OF UNDESIRABLE VEGETATION

BM6205 MEASUREMENT AND PAYMENT

Amend items "M620.01" *and* "M620.02" *to read as items* "BM620.01" *and* "BM620.02" *and replace them with the following items:*

"Item Unit

BM620.01 Annual chemical eradication of undesirable vegetation

(a) Reserve with dual carriageway ..... number (no)

(b) Reserve with single carriageway ..... number (no)

The unit of measurement shall be the number of annual chemical eradication of undesirable vegetation per section as specified, and described in sub-clause M6202 (b). A selective herbicide shall be used. The Contractor is to assess the number of different types of chemicals that will be required to eradicate the areas of undesirable vegetation.

The tendered rate shall include full compensation for all labour, equipment and chemical required for the spraying of the chemicals in accordance with the manufacturer's specifications. The tendered rates shall be fully inclusive of any costs arising from restricted working conditions due to the nature of the site or traffic flow.

Payment will be made as follows:

(a) 60% will be payable when visible results are obtained

(b) The remaining 40% will be payable when at least 90% of the treated vegetation has been controlled in the opinion of the Engineer.

Item Unit

BM620.02 Additional chemical eradication of undesirable vegetation and control of vegetation growth on instruction of the Engineer

(a) Isolated areas ..... area (m^2)

(b) Dense areas (areas more than 20% infested) ..... hectare (ha)

(c) Shoulder weedspray ..... kilometre (km)

(d) Extra over sub-item BM620.02 (c) under guardrails ..... kilometre (km)

(e) Between road reserve fence and neighbouring solid wall ..... area (m^2)

(f) Around road signs, marker boards and traffic count stations

(i) Reserve with dual carriageway ..... number (no)

(ii) Reserve with single carriageway ..... number (no)

(g) Openings, cracks and joints on concrete channels, lay-byes and block paved areas, and joints between the road pavement and concrete channels

(i) Reserve with dual carriageway ..... number (no)

(ii) Reserve with single carriageway ..... number (no)

The unit of measurement for the items shall be as specified, for the additional chemical eradication of undesirable vegetation and control of vegetation growth on instruction of the Engineer, as described in sub-clause M6202 (a).

The herbicides to be used per sub-clause M6202 (a) are as follows:

items (i), (ii) and (iv)	-	selective herbicide
items (iii), (vi) and (vii)	-	non-selective herbicide with three months residual
item (v)	-	contact herbicide

The Contractor is to assess the number of different types of chemicals that will be required to eradicate the areas of undesirable vegetation and control the vegetation growth.

The tendered rate shall include full compensation for all labour, equipment and chemical required for the spraying of the chemicals in accordance with the manufacturer's specifications. The tendered rates shall be fully inclusive of any costs arising from restricted working conditions due to the nature of the site or traffic flow.

Payment will be made as follows:

(a) 60% will be payable when visible results are obtained

(b) The remaining 40% will be payable when at least 90% of the treated vegetation has been controlled in the opinion of the Engineer."

SECTION M6300: REMOVAL OF UNDESIRABLE VEGETATION: PHYSICAL ERADICATION

M6302 EXECUTION OF WORK

Add the following to paragraph (c)

"Before commencement of the burning of fire breaks the Contractor shall submit for approval by the Engineer a method statement stating the procedure to be followed during the burning process.

Included in the Contractor's risk assessment as part of the OH&S Act he shall do a risk assessment for the burning of firebreaks."

M6304 MEASUREMENT AND PAYMENT

Amend item "M630.01" *to read as item* "BM630.01*" and replace sub-item (a) with the following sub-item:*

"Item	Unit
BM630.01 Eradication of undesirable vegetation	
(b) Annual eradication	Number (no)

The unit of measurement shall be the number of annual eradications done on instruction of the Engineer. Annual eradication will only commence once the initial eradication as per item BM630.01 (a) is completed."

SECTION M6400: MAINTENANCE AND ESTABLISHMENT OF PLANTS, TREES AND SHRUBS

BM6404 MEASUREMENT AND PAYMENT

Amend item "M640.05" *to read as item* "BM640.05*" and replace with the following item:*

"Item		Unit
BM640.05	Supply of trees, shrubs and hedge plants	
(a)	Supply of trees, shrubs and hedge plants ..... provisional sum (Prov Sum)	
(b)	The Contractor's overhead charges and profit in respect of sub-item BM640.05 (a) ..... percentage (%)	

Measurement and payment shall be in accordance with the provisions of sub-clause 13.5 of the FIDIC Conditions of Contract for Construction, 1999. The tendered percentage for sub-item BM640.05 (b) is a percentage of the amount actually spent under sub-item BM640.05 (a), which shall include full compensation for the overhead charges and profit of the Contractor."

Add the following new item:

"Item		Unit
BM640.07	Trimming of branches of trees on instruction of the Engineer	No

The unit of measurement shall be the number of trees trimmed as instructed by the Engineer. The tendered rate shall include full compensation for trimming branches to a height of 2m above ground level, removing them from site, spoiling it at an approved dump site, and for all labour, as may be necessary for completing the work.

SECTION M7100: EMERGENCY STANDBY TEAM

BM7102 EXECUTION OF WORK

Delete the third paragraph in item (c) relating to the requirement for an electronically illuminated high visibility sign.

SECTION M7200: ALL-EMERGENCY NORMALISATION

M7204 MEASUREMENT AND PAYMENT

Replace pay item B720.01 with the following:

"Item Unit

BM720.01 All-emergency normalisation

(a) Accident restoration and clearing of spillages ..... hour

(b) Sheltering of animals ..... hour

(c) Fire fighting ..... hour

(d) Safeguarding of dangerous area ..... hour

The unit of measurement shall be the number of hours spent at the scene of the accidental event in the execution of all work necessary to normalise, restore or safeguard the roadway and road surface. Travelling time to and from the scene is excluded.

The tendered rates shall include full compensation for all costs of operation of the emergency team and equipment in the execution of the work.

The tendered rates shall be deemed to include full compensation for all labour, overheads, head-office expenses, profits, fuel and disbursements."

Add the following pay item BM720.02:

"Item Unit

BM720.02 Procurement of materials

(a) Procurement of materials ..... provisional sum (Prov Sum)

(b) The Contractor's overhead charges and
profit in respect of sub-item BM720.02 (a) ..... percentage (%)

The unit of measure for sub-item BM720.02 (a) shall be the amounts actually paid for the procurement of materials for all-emergency normalisation on instruction of the Engineer. In addition, the type of cleaning material to be used shall be approved by the Engineer prior to the procurement thereof.

Measurement and payment shall be in accordance with the provisions of sub-clause 13.5 of the FIDIC Conditions of Contract for Construction, 1999. The tendered percentage for sub-item BM720.02 (b) is a percentage of the amount actually spent under sub-item BM720.02 (a), which shall include full compensation for the overhead charges and profit of the Contractor."

SECTION M9100: DAYWORK SCHEDULE

M9104 MEASUREMENT AND PAYMENT

BM910.01 Labour during normal work hours

Amend item "M910.01" *to read as item* "BM910.01*" and add the following sub-item:*

Item		Unit
(f)	Surveyor	Hour (hr)
(g)	Travel for surveyor	kilometre (km)

The unit of measurement for sub-item BM910.01 (f) shall be the hours worked and for the subitem BM910.01(g) the kilometres travelled.

The tendered rate for sub-item (f) shall include the provision of all surveying equipment, survey assistants for a period of less than 12 hours and producing one hard copy of the surveyed area and a copy in electronic format.

The kilometres travelled shall be measured from the Contractor's base camp to the site and the return trip."

Replace item number M910.03 (b) with BM910.03 (b) as follows:

"BM910.03 (b) TLB – Tractor, loader, backhoe (bucket size 0.5m³)" ..... hour (h)

Replace item number M910.03 (s) with BM910.03 (s) as follows:

"BM910.03 (s) TLB – Tractor, loader, backhoe (bucket size 0.5m³)" ..... number (no)

Replace item number M910.05 (b) with BM910.05 (b) as follows:

"BM910.05 (b) TLB – Tractor, loader, backhoe (bucket size 0.5m³)" ..... number (no)

Add the following items to:

"Item		Unit
BM910.03	Transport and Equipment	
(u)	Sky-jack 5 m	hour (h)
(v)	Wood chipper (capacity 100 mm branches)	hour (h)
(w)	Stump grinder	hour (h)
(x)	Electrical drill (chuck size > 10 mm, min 1000 W).....	hour (h)
(y)	Bobcat	hour (h)

Add the following pay item BM910.06:

"Item Unit

BM910.06 Repairs to road network

(a) Repairs to road network ..... provisional sum (Prov Sum)

(b) The Contractor's overhead charges and
profit in respect of sub-item BM910.06 (a) ..... percentage (%)

This pay item is for the emergency or specialist repairs to the road network which is required by the Employer, and which work will be undertaken by a nominated subContractor, and will be for work in excess of R100,000.00 per service. Arrangements for the services required and supervision thereof, will be undertaken by the Engineer. The Contractor will only be required to make arrangements for the payment of the services required.

The unit of measure for sub-item BM910.06 (a) shall be the amounts actually paid for the procurement of the services required for the repairs to the road network on instruction of the Engineer.

Measurement and payment shall be in accordance with the provisions of sub-clause 13.5 of the FIDIC Conditions of Contract for Construction, 1999. The specified percentage for sub-item BM910.06 (b) is fixed at 3% of the amount actually spent under sub-item BM910.06 (a), which is full compensation for the overhead charges and profit of the Contractor."

Add the following pay item BM910.07:

"Item Unit

BM910.07 Providing of security guards on site

(a) Providing of security guards on site ..... provisional sum (Prov Sum)

(b) The Contractor's overhead charges and
profit in respect of sub-item BM910.07 (a) ..... percentage (%)

Measurement and payment shall be in accordance with the provisions of sub-clause 13.5 of the FIDIC Conditions of Contract for Construction, 1999. The tendered percentage is a percentage of the amount actually spent under sub-item BM910.07 (a), which shall include full compensation for the overhead charges and profit of the Contractor."

C3.3 ENVIRONMENTAL MANAGEMENT PLAN

C3.3.1 SCOPE

This environmental management plan (EMP) sets out 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 and the Scope of Work, and the defects notification period (maintenance period).

The provisions of this EMP 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. In the event that any conflict occurs between the terms of the EMP and the Scope of Work, the terms herein shall be subordinate.

The EMP is a dynamic document subject to similar influences and changes as are wrought by variations to the provisions of the Scope of Work. Any substantial changes shall be submitted to the Employer in writing for approval.

The EMP identifies the following:

(a) construction activities that will impact on the environment.;
(b) specifications with which the Contractor shall comply in order to protect the environment from the identified impacts; and
(c) actions that shall be taken in the event of non-compliance.

C3.3.2 DEFINITIONS

C3.3.2.1 **Alien Vegetation:** alien vegetation is defined as undesirable plant growth which shall include, but not be limited to, all declared category 1 and 2 listed invader species as set out in the Conservation of Agricultural Resources Act (CARA) regulations. Other vegetation deemed to be alien shall be those plant species that show the potential to occupy in number, any area within the defined construction area.

C3.3.2.2 **Construction Activity:** a construction activity is any action taken by the Contractor, his subContractors, suppliers or personnel during the construction process as defined in the Gauteng Transport Infrastructure Act.

C3.3.2.3 **Environment:** environment means the surroundings within which humans exist and that could be made up ofs:

(a) the land, water and atmosphere of the earth;
(b) micro-organisms, plant and animal life;
(c) any part or combination of (a) and (b) and the interrelationships among and between them; and
(d) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

C3.3.2.4 **Environmental Aspect:** an environmental aspect is any component of a Contractor's construction activity that is likely to interact with the environment.

C3.3.2.5 **Environmental Impact:** an impact or environmental impact is the change to the environment, whether desirable or undesirable, that will result from the effect of a construction activity within the road width and between the limits that define the construction site. An impact may be the direct or indirect consequence of a construction activity.

C3.3.2.6 **Record of Decision**: a record of decision is a written statement from the National Department of Environmental Affairs and Tourism, (N.DEAT) that records its approval of a planned undertaking

to improve, upgrade or rehabilitate a section of road and the mitigating measures required to prevent or reduce the effects of environmental impacts during the life of a contract.

C3.3.2.7 **Road Reserve:** the road reserve is a corridor of land, defined by co-ordinates and proclamation, within which the road, including access intersections or interchanges, is situated. A road reserve may, or may not, be bounded by a fence.

C3.3.2.8 **Road Width:** for the purposes of the EMP, the road width is defined as the area within the road reserve i.e. fence line to fence line, but also includes all areas beyond the road reserve that are affected by the continuous presence of the road, e.g. a reach of a water course.

C3.3.3 IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS

The Contractor shall identify likely aspects before commencing with any construction activity. Examples of environmental aspects include:

(a) waste generation
(b) stormwater discharge
(c) emission of pollutants into the atmosphere
(d) chemical use operations;
(e) energy use operations;
(f) water use operations; and
(g) use of natural resources.

Thereafter, 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. If prevention is not practicable, or in the event of mishap or misapplication, the Contractor shall provide plans and measures for the Engineer's approval, which will limit and contain the magnitude, duration and intensity of the impact. The Contractor 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 an approved construction programme according to the General Conditions of Contract and the Scope of Work.

Listed below are some environmental impacts that could adversely alter an aspect of the environment through usual construction activities:

(a) pollution of atmosphere, soil or water;
(b) destruction or removal of fauna and flora and effect on biological diversity; (c) deformation of the landscape;
(d) soil erosion;
(e) destruction of historical/heritage sites;
(f) effect on the built environment; and (g) effect on agricultural land and wetlands.

General good construction practice will play an important role in avoiding the occurrence of an Impact. The Contractor's attention is drawn, in this regard, to Clause C3.3.8 Environmental Management of Construction Activities

C3.3.4 LEGAL REQUIREMENTS

C3.3.4.1 General

Construction will be according to the best industry practices, as identified in the project documents. This EMP, 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 EMP are legally binding in terms of environmental statutory legislation and in terms of the additional conditions to the general conditions of contract that pertain to this project. In the event that any rights and obligations

contained in this document contradict those specified in the standard or Scope of Work then the latter shall prevail

C3.3.4.2 Statutory and other applicable legislation

It is expected that the Contractor is conversant with all legislation pertaining to the environment, including provincial and local government ordinances, which may be applicable to the contract.

C3.3.5 ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS

C3.3.5.1 Appointment of a Designated Environmental Officer (DEO)

For the purposes of implementing the conditions contained herein, the Contractor shall submit to the Engineer for approval the appointment of a nominated representative of the Contractor as the DEO for the contract. The request shall be given, in writing, at least fourteen days before the start of any work clearly setting out reasons for the nomination, and with sufficient detail to enable the Engineer to make a decision. The Engineer will, within seven days of receiving the request, approve, reject or call for more information on the nomination. Once a nominated representative of the Contractor has been approved he/she shall be the DEO and shall be the responsible person for ensuring that the provisions of the EMP are complied with during the life of the contract. The Engineer will be responsible for issuing instructions to the Contractor where environmental considerations call for action to be taken. The DEO shall submit regular written reports to the Engineer, but not less frequently than once a month.

The Engineer shall have the authority to instruct the Contractor to replace the DEO if, in the Engineer's opinion, the appointed officer is not fulfilling his/her duties in terms of the requirements of the EMP or this specification. Such instruction will be in writing and shall clearly set out the reasons why a replacement is required.

There shall be an approved DEO on the site at all times.

C3.3.5.2 Administration

Before the Contractor begins each construction activity the DEO shall give to the Engineer a written statement setting out the following:

(a) the type of construction activity;
(b) locality where the activity will take place;
(c) identification of the environmental aspects and impacts that might result from the activity;
(d) methodology for impact prevention for each activity or aspect;
(e) methodology for impact containment for each activity or aspect; (f) emergency/disaster incident and reaction procedures; and
(g) treatment and continued maintenance of impacted environment.

The Contractor may 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.

C3.3.5.3 Good housekeeping

The Contractor shall undertake “good housekeeping” practices during construction. 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.

C3.3.6 TRAINING

The designated environmental officer (DEO) must be appropriately trained in environmental management and must 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. The environmental training should, as a minimum, include the following:

(a) the importance of conformance with all environmental policies;
(b) the environmental impacts, actual or potential, of their work activities;
(c) the environmental benefits of improved personal performance;
(d) their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirement of the Agency’s environmental management systems, including emergency preparedness and response requirements;
(e) the mitigation measures required to be implemented when carrying out their work activities; and
(f) the potential consequences of departure from specified operating procedures.

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 it intends concluding its environmental training obligations.

C3.3.7 ACTIVITIES AND ASPECTS CAUSING IMPACTS

The list of possible causes of environmental impacts that occur during construction activities include pollution type, deformation of the landscape, soil erosion and alien vegetation. In order to minimise the impacts, care shall be taken with, *inter alia*, the treatment of waste, spillage, storage, noise and dust control, selection of site, preservation of indigenous vegetation and topsoil, management of weeds, and the demarcation of sensitive areas.

C3.3.8 ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION ACTIVITIES

In managing the construction activities, there are mitigating measures which can be implemented to minimise the cost and impacts. These measures are detailed in Table C3.3.8/1 at the end of this section of the specifications.

C3.3.8.1 Site establishment

(a) Site Plan

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 construction 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 treatment 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 as possible. Regardless of the chosen site, the Contractor's intended mitigation measures shall be indicated on the plan. The site plan shall be submitted not later than the first site meeting. 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.

(b) Vegetation

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, same specie indigenous trees as were occurring, shall be re-established.

The specification for the rehabilitation of the grass cover shall be strictly adhered to. 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. A firebreak shall be cleared and maintained around the perimeter of the camp and office sites.

(c) Rehabilitation

The area where the site offices were erected will require rehabilitation at the end of the contract. All construction material, including concrete slabs and braai areas shall be removed from the site on completion of the contract.

(d) Water for human consumption

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 (inter alia, streams, rivers, pans and dams). Only domestic type wastewater shall be allowed to enter this drain.

(e) 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.

C3.3.8.2 Sewage treatment

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 project management, 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 subContractor. The type of sewage treatment 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.

C3.3.8.3 Waste management

The Contractor's intended methods for waste management and waste minimisation shall be implemented at the outset of the contract. All personnel shall be instructed to dispose of all waste in the proper manner.

(a) Solid waste

Solid waste shall be stored in an appointed area in covered, tip proof metal drums for collection and disposal. A refuse control system shall be established for the collection and removal of refuse to the satisfaction of the Engineer. Disposal of solid waste shall be at a Department of Water Affairs and Forestry (DWAF) licensed landfill site or at a site approved by DWAF in the event that an existing operating landfill site is not within reasonable distance from the site offices and staff accommodation. No waste shall be burned or buried at or near the site offices, nor anywhere else on the site, including the approved solid waste disposal site.

(b) Litter

No littering by construction workers shall be allowed. During the construction period, the 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.

(c) Hazardous waste

Hazardous waste such as bitumen, tar and oil, shall be disposed of in a Department of Water Affairs and Forestry approved landfill site. Special care shall be taken to avoid spillage of tar or bitumen products such as binders or pre-coating fluid to avoid water-soluble phenols from entering the ground or contaminating water.

Under no circumstances shall the spoiling of tar or bituminous products on the site, over embankments, in borrow pits or any burying, be allowed. Unused or rejected tar or bituminous products shall be returned to the supplier's production plant. No spillage of tar or bituminous products shall be allowed on site. Affected areas shall be promptly reinstated to the satisfaction of the Engineer.

C3.3.8.4 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 whether it is serviced on the site (i.e. at the place of construction activity or at a formalised workshop).

(a) Safety

All the necessary handling and safety equipment required for the safe use of petrochemicals and oils shall be provided by the Contractor to, and used or worn by, the staff whose duty it is to manage and maintain the Contractor's and his subContractor's and supplier's plant, machinery and equipment.

(b) Hazardous material storage

Petrochemicals, oils and identified hazardous substances shall only be stored under controlled conditions. All hazardous materials e.g. tar or bitumen binders shall be stored in a secured, appointed area that is fenced and has restricted entry. Storage of tar or 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 against 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.

(c) Fuel and gas storage

Fuel should be stored in a secure area in a steel tank supplied and maintained by the fuel suppliers. Leakage of fuel shall be avoided. An adequate bund wall, 110% of volume, shall be provided for fuel and diesel areas to accommodate any spillage or overflow from these substances. The area inside the bund wall shall be lined with an impervious lining to prevent infiltration of the fuel into the soil.

Gas welding cylinders and LPG cylinders shall be stored in a secure, well-ventilated area.

(d) 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.

C3.3.8.5 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.

The plan 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 subsequent inspections.

The Contractor shall be held responsible for re-establishment of grass within the road reserve boundaries for all areas disturbed during road construction. This includes, for example, service roads, stockpile areas, stop/go facilities, windrows and wherever material generated for, or from, road construction has to be stored temporarily or otherwise within the road reserve, or at designated or instructed areas outside the road reserve. This responsibility shall extend until expiry of the defects liability period.

C3.3.8.6 Soil management

(a) 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 the 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 Department of Water Affairs and Forestry 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 shall not exceed a height of 2 m, and 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 topsoiled 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.

(b) Subsoil

The subsoil is the layer of soil immediately beneath the topsoil. It shall be removed, to a depth instructed by the Engineer, and stored separately from the topsoil if not used for road building. This soil shall be replaced in the excavation in the original order it was removed for rehabilitation purposes.

C3.3.8.7 Drainage

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, direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous or tar 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.

C3.3.8.8 Earthworks and layerworks

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 Sub-clauses C3.3.8.5 and C3.3.8.7. In addition, the Contractor shall take cognisance of the requirements set out below.

(a) Quarries and borrow pits

The Contractor's attention is drawn to the requirement of the Department of Minerals and Energy, that before entry into any quarry or borrow pit, an EMP 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 obtains from the Engineer, a copy of the approved EMP prior to entry into the quarry or borrow pit. The conditions imposed by the relevant EMP 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 EMP and this specifications the former shall apply. The cost of complying with the requirements shall be deemed to be included in existing rates in the Schedule of Quantities.

(b) 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, 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.

(c) 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 liability 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 revegetation.

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. Slopes shall not exceed a vertical: horizontal ratio of 1:3. Only under exceptional circumstances will approval be given to exceed this ratio. Appropriate grassing measures to minimise soil erosion shall be undertaken by the Contractor. This will 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 liability period upon receipt from the Contractor of a landowner's clearance notice and an Engineer's certificate certifying slope stability. The Contractor's costs incurred in obtaining the necessary certification for opening and closing of spoil sites shall be deemed to be included in the tendered rates for spoiling.

(d) 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, containment and rehabilitation against environmental damage.

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 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 material from road construction activities may not be swept off the road and left unless specifically instructed to do so in the contract drawing 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 clause only when they have been satisfactorily rehabilitated.

(e) 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 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 all details of the dwellings/structures/services including existing positions, 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 advertise to the adjacent communities and/or road users the time and delays to be expected for each individual blast.

C3.3.8.9 Batching sites

Asphalt plants are considered scheduled processes listed in the second schedule to the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965). Should the use of an asphalt plant be considered on site, the Contractor shall be responsible to obtain the necessary permit from the Department of Environmental Affairs and Tourism, regardless of where they are sited.

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 Department of Minerals and Energy legislation as well as 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 Sub-clause C3.3.8.8 (c), 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.

Effluent from concrete batch plants and crusher plants shall be 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

C3.3.8.10 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 tar or 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 treatment lies with the Contractor. The individual responsible for, or who discovers a hazardous waste spill must report the incident to his/her DEO or to the Engineer. The Designated Environmental Officer 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 revegetated 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.

C3.3.8.11 Areas of specific importance

Any area, as determined and identified within the project document as sensitive or of special interest within the site shall be treated according to the express instructions contained in these specifications or the approved EMP. 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 shall 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 require 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 National Monuments Council is to be contacted who will appoint an archaeological consultant. Work may only resume once clearance is given in writing by the archaeologist.

(b) Graves and middens

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 National Monuments Council 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 the National Monuments Council, be responsible for attempts to contact family of the deceased and for the site where the exhumed remains can be re-interred.

C3.3.8.12 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. Compliance with the appropriate legislation with respect to noise, shall be mandatory.

Should noise generating activities have to occur at night the people in the vicinity of the drilling shall be warned about the noise well in advance and the activities kept to a minimum.

C3.3.8.13 Dust control

Dust caused by strong winds shall be controlled by means of water spray vehicles. Dust omission from batching plants shall be subject to the relevant legislation and shall be the subject of inspection by the relevant Department of Minerals and Energy.

C3.3.8.14 Alien vegetation

The Contractor shall be held responsible for the removal of alien vegetation within the road reserve disturbed during road construction. 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 or otherwise within the road reserve. This responsibility shall extend for the duration of the defects liability period.

C3.3.9 RECORD KEEPING

The Engineer and the DEO to the Contractor will continuously monitor the Contractor's adherence to the approved impact prevention procedures and shall issue to the Contractor a notice of non-compliance whenever transgressions are observed. The DEO should document the nature and magnitude of the non-conformance in a designated register, the action taken to discontinue the non-conformance, the action taken to mitigate its effects and the results of the actions. The non-conformance shall be documented and reported to the Engineer in the monthly report.

Copies of any record of decision or EMP's 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 or relevant environmental departments.

C3.3.10 COMPLIANCE AND PENALTIES

The Contractor shall act immediately when such 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 a verbal report given at the monthly site meetings.

Any avoidable non-compliance with the above-mentioned measures shall be considered sufficient ground for the imposition of a penalty. The value of the penalty shall not be less than the payment that would have been due to the Contractor for the day's production of the relevant item of work that gave cause for the infringement. The imposition of such a penalty shall not preclude the relevant provincial or national authority from applying an additional penalty in accordance with its statutory powers. Any non-compliance with the agreed procedures of the EMP is a transgression of the various statutes and laws that define the manner by which the environment is managed.

Failure to redress the cause shall be reported to the relevant authority for them to deal with the transgression, as it deems fit.

C3.3.11 MEASUREMENT AND PAYMENT

The Contractor shall not be separately reimbursed or compensated in respect of his compliance with the provisions of this Section C3.3 of the Scope of Work. All costs incurred in this regard shall, save and except to the extent as provided for in the Bill of Quantities under SECTION M0300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS, be considered to be included in the rates tendered for the various items of work listed in the Bill of Quantities.

TABLE C3.3.8/1: SUMMARY OF MITIGATION MEASURES

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION
Establishment of site offices	Siting of offices	Preferred areas to be flat areas along the route. Avoid steep areas as soil erosion could increase. Avoid water courses
	Site Plan	Contractor to provide Engineer detail of layout of site facilities ie chemical toilets, the demarcation of areas for stockpiling of materials, storage of hazardous materials and the provision of containers. The offices shall be fenced. The site plan to be submitted within two weeks of the Commencement Date.
Site rehabilitation	Cleanup	All construction material is to be removed from the site on completion of the contract.
Vegetation	On site	Vegetation planted on the site is to be indigenous. Only trees directly affected by works as confirmed in writing by Engineer, shall be sawn off/removed.
	Weeds	Clearance of weeds must be done by hand before seeding.
	Grass cover	The grass cover surrounding the site is to be left as intact as possible or restored to its original condition.

TABLE C3.3.8/1: SUMMARY OF MITIGATION MEASURES

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION
Water	Available for human consumption	Water for human consumption must be tested and treated in accordance with recommendations.
Soil management	Topsoil	The topsoil (± 300 mm) of any excavation shall be removed and stockpiled separately from underlying material in designated areas.
	Borrow material	EMP's for borrow pits to be submitted to the Department of Mineral and Energy Affairs for approval
Archaeological & Cultural sites	Discover of archaeological sites of artefacts	If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately and an archaeological consultant must be contacted. Work may only resume once clearance is given in writing by the archaeologist.
Graves	Discovery of graves	If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker should be contacted
Waste management	Solid & Construction waste	Solid waste is to be stored in a designated area for collection and disposal. Disposal of waste will be in a DWAF licensed landfill, and no waste may be burnt on site.
	Litter	The site is to be kept free of litter
Sewage treatment	Toilet facilities	Adequate toilet facilities are to be provided, and the siting of chemical toilets is to be done in consultation with the Engineer. Use of the veld for this purpose shall not be allowed.
Fuel, diesel & hazardous materials	Hazardous Materials	All hazardous materials, i.e. bitumen binders, to be stored in a designated area that is fenced and has restricted entry. No spoiling of bituminous products on site, over embankments, in borrow pits or any burying. No spillage of bituminous products shall be allowed on site.
	Fuels	All fuel tanks will be erected in a designated area. Leakage is to be avoided.
	Cooking fuel	The Contractor shall ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.
	Oil, grease	Oil, grease and cleaning materials from maintenance of vehicles shall be collected in a sump and returned to the supplier.
	Spillages	Streams, rivers or dams must be protected against spillages of pollutants. In the event of a spillage, prompt action must be taken to clear the affected area.

TABLE C3.3.8/1: SUMMARY OF MITIGATION MEASURES

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION
General considerations	Lines of authority	A nominated representative of the Contractor will be the Designated Environmental Officer for the site.
	Reports	The Designated Environmental Officer will submit monthly reports to the Engineer who will verify the information
	Complaints	Complaints received regarding activities on the site pertaining to the environment should be recorded in a designated register, and the response noted with the date and action taken. This record must be submitted with the monthly report

C3.4 TARGETED PROCUREMENT PROCEDURE

C3.4.1 SCOPE

This section provides the specifications that relate to the Contractor's implementation of the policies and initiatives of the Government, community participation, and employment of Small, Medium and Micro Enterprises (SMME), including those SMME which are Black Enterprises (BE), training and mentoring of SMME, and engagement and training of labour recruited from local communities. These specifications should be read in conjunction with the various statutes and legislation that relate to small businesses and Broad-Based Black Economic Empowerment.

In this regard all tenders will be considered with specific reference to applicable legislation in force from time to time and which are specifically applicable to organs of state for example the following:-

(i) The Constitution of the Republic of South Africa, 1993;
(ii) Public Finance Management Act, 1999 (Act No 1 of 1999);
(iii) Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000);
(iv) Broad-Based Black Economic Empowerment Act, 2003 (Act No 53 of 2003);
(v) Construction Industry Development Board Act, 2000 (Act No 38 of 2000) and Regulations; and
(vi) National Small Business Amendment Act, 2003 (Act No 26 of 2003).

The Employer may have to amend its targeted procurement procedure in order to meet new or revised targets and requirements of legislation, and the Transport and Construction Charters. The Employer would then negotiate with the Contractor on the implementation of the revised targeted procurement procedure, and the associated costs.

C3.4.2 DEFINITIONS

The following words and expressions shall have the meanings stated.

C3.4.2.1 Black Enterprise (BE): an enterprise defined as a company or economic activity that is at least 50.1% owned by black persons and where there is substantial management control by Black People. Ownership refers to economic interest, whilst management refers to the membership of any board or similar governing body of the enterprise.

C3.4.2.2 **Black People (BP):** African, Coloured or Indian persons who are natural persons and:

(i) are citizens of the Republic of South Africa by birth or descent: or
(ii) are citizens of the Republic of South Africa by naturalisation before the commencement date of the Constitution of the Republic of South Africa Act of 1993; or
(iii) became citizens of the Republic of South Africa after the commencement date of the Constitution of the Republic of South Africa Act of 1993, but who, but for the Apartheid policy that had been in place prior to that date, would have been entitled to acquire citizenship by naturalisation prior to that date.

C3.4.2.3 **Project Management Team:** three persons comprising the Employer, Engineer and Contractor.

C3.4.2.4 **Small, Medium and Micro Enterprise (SMME):** a separate and distinct business entity, including cooperative enterprises and non-governmental organisations, managed by one owner or more, including its branches or subsidiaries, if any, and is registered with the South African Revenue Service, and which can be classified as a small, medium or micro enterprise by satisfying the size variation criteria according to the type of enterprise in Tables C3.4.2/1 or C3.4.2/2 below:

TABLE C3.4.2/1 : SMME SUBCONTRACTORS
SubContractors with a CIDB Contractor grading designation of 3 or higher in the CEcategory.

TABLE C3.4.2/2: SMME SUPPLIERS AND OTHER SERVICE PROVIDERS *

Size	**Total Full time, Equivalent of Paid Employees**	**Total Annual Turnover**	**Total Goss Asset Value (fixed property excluded_**
	Less than	***Less than***	***Less than***
Medium	200	R26 m	R5 m
Small	50	R6 m	R1 m
Micro`	5	R0.2 m	R0.1 m

* In terms of the National Small Business Amendment Act, 2003 (Act No 26 of 2003)

C3.4.3 UTILISATION OF SMME

C3.4.3.1 Objective

A major objective of the targeted procurement procedure is to extend economic opportunities and entrepreneurial capacity to all localities by the optimum utilisation of the resources existing in the vicinity of projects, the development of these resources in the execution of the project, and by maximising the amount of project funds retained within the project locality.

C3.4.3.2 Target values

The target values of the scheduled work in the operational section to be sublet to SMME by the Contractor, depends on the equity held by Black People in the enterprise as the Contractor, either as a single entity or joint venture. The target values of the operational work undertaken are shown Table C3.4.3/1.

TABLE C3.4.3/1: TARGET VALUES OF OPERATIONAL WORK TO BE UNDERTAKEN		
Enterprise	**Contractor <30% Black People equity**	**Contractor ≥30% Black People equity**
Contractor	Max 20%	Max 40%
SMME (BE)	Min 72%	Min 52%
SMME (non BE)	Max 8%	Max 8%

Not Applicable

The value of work for calculation purposes shall be determined at the tendered rates of the SMME inclusive of any equipment and materials financed and supplied by the Contractor. The value of the work shall include contract price adjustment (CPA), but exclude value added tax (VAT). Only work undertaken by SMME that qualify in terms of the definition, and which has been sublet according to the specifications for the tender process, shall count towards the achievement of the target. Any work which the Contractor is specifically instructed to execute by the Engineer as opposed to subletting to SMME, shall be excluded from the target value of work to be sublet. To evaluate the value of work undertaken by SMME, the Contractor shall submit a copy of the relevant invoices, to the Engineer for verification purposes.

C3.4.3.3 Accredited registration

Achievement measured against the SMME target value shall only be accepted if the respective SMME for which services or work is being claimed as having been performed, is registered with an accredited agency as required by law. In addition, documentary evidence that such SMME is registered with the South African Revenue Service shall be lodged with the Engineer before the work or service may be considered as having been performed by a *bona fide* SMME. The responsibility for producing evidence of the respective registration documentation shall rest with the Contractor.

C3.5 OCCUPATIONAL HEALTH AND SAFETY

C3.5.1 SCOPE

This part of the specification has the objective to assist the principal Contractor entering into a contract with Gauteng Provincial Department of Roads and Transport, to comply with the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) (OH&S) **and Construction Regulations to the Act as amended in 2014**. Compliance with this document does not absolve the principal Contractor from complying with minimum legal requirements and the principal Contractor remains responsible for the health and safety of his employees and those of his Mandataries. Principal and other Contractors should, therefore, insist that this part of the specification form part of any contract that he may have with other Contractors and/or suppliers.

This section covers the development of a health and safety specification that addresses all aspects of occupational health and safety as affected by this contract. It provides the requirements that principal Contractors and other Contractors shall comply with in order to reduce the risks associated with this contract that may lead to incidents causing injury and/or ill health.

C3.5.2 GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS

C3.5.2.1 Hazard Identification and Risk Assessment (Construction Regulation 9, 2014)

C3.5.2.1.1 Risk Assessments

Paragraph C3.5.4 contains a generic list of risk assessment headings that have been identified by Gauteng Provincial Department of Roads and Transport as possibly applicable to this contract. It is, by no means, exhaustive and is offered as assistance to Contractors intending to tender.

C3.5.2.1.2 Development of Risk Assessments

Every principal Contractor performing construction work shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, cause a risk assessment to be performed by a competent person, appointed in writing, and the risk assessment shall form part of the OH&S plan and be implemented and maintained as contemplated in Construction Regulation 7(1), 2014.

The risk assessment shall include, at least:

- the identification of the risks and hazards to which persons may be exposed
- the analysis and evaluation of the risks and hazards identified
- a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified
- a monitoring plan and
- a review plan

Based on the risk assessment, the principal Contractor shall develop a set of site-specific OH&S rules that shall be applied to regulate the OH&S aspects of the construction. The risk assessment, together with the site-specific OH&S rules shall be submitted to Gauteng Provincial Department of Roads and Transport before construction on site commences. Despite the risk assessments listed in paragraph C3.5.4, the principal Contractor shall conduct a baseline risk assessment and the aforesaid listed risk assessment shall be incorporated into the baseline risk assessment. The baseline risk assessment shall further include the standard working procedures and the applicable method statements based on the risk assessments

All variations to the scope of work shall similarly be subjected to a risk assessment process.

C3.5.2.1.3 Review of Risk Assessment

The principal Contractor shall review the hazard identification, risk assessments and standard working procedures at each production planning and progress report meeting as the contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The principal Contractor shall provide Gauteng Provincial Department of Roads and Transport, other Contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated in paragraph C3.5.2.1.3.

C3.5.2.2 Legal Requirements

A principal Contractor shall, as a minimum, comply with:

- The Occupational Health and Safety Act and Regulations (Act 85 of 1993), an up-todate copy of which shall be available on site at all times.
- The Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993), an up-to-date copy of which shall be available on site at all times.
- Where work is being carried out on a “mine”, the Contractor shall comply with the Mines Health and Safety Act and Regulations (Act 29 of 1960) and any other OH&S requirements

that the mine may specify. An up-to-date copy of the Mines Health and Safety Act and Regulations shall be available on site at all times.

C3.5.2.3Structure and Responsibilities

C3.5.2.3.1 Overall Supervision and Responsibility for OH&S

It is a requirement that the principal Contractor, when he appoints Contractors (SubContractors) in terms of Construction Regulations 7(1)(a - g), 7(2)(a - e),7(3)(4)(5)(6)(7)(8) includes in his agreement with such Contractors the following :

- OH&S Act (85 of 1993), Section 37(2) agreement: “Agreement with Mandatary”
- OH&S Act (85 of 1993), Section 16(2) appointee/s as detailed in his/their respective appointment forms.

C3.5.2.3.2 Further (Specific) Supervision Responsibilities for OH&S

The Contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations. Below is a generic list of identified appointments and may be used to select the appropriate appointments for this contract. The Contractor shall note that it is a generic list only and is intended for use as a guideline.

Ref. Section/Regulation in OHS Act

Batch Plant Supervisor	(Construction Regulation 8(1))
Construction Vehicles/Mobile Plant/Machinery Supervisor	(Construction Regulation 23)
Demolition Supervisor	(Construction Regulation 14)
Drivers/Operators of Construction Vehicles/Plant	(Construction Regulation 23)
Electrical Installation and Appliances Inspector	(Construction Regulation 24)
Emergency/Security/Fire Coordinator	(Construction Regulation 29)
Excavation Supervisor	(Construction Regulation 13)
Explosive Powered Tool Supervisor	(Construction Regulation 21)
Fall Protection Supervisor	(Construction Regulation 10)
First Aider	(General Safety Regulation 3) Fire
Equipment Inspector	(Construction Regulation 29)
Formwork & Support work Supervisor	(Construction Regulation 12)
Hazardous Chemical Substances Supervisor	(HCS Regulations)
Incident Investigator	(General Admin Regulation 29)
Ladder Inspector	(General Safety Regulation 13A)
Lifting Equipment Inspector	(Construction Regulation 22)
Materials Hoist Inspector	(Construction Regulation 19)
OH&S Committee	(OHS Act Section 19)
OH&S Officer	(Construction Regulation 8(5))
OH&S Representatives	(OHS Act Section 17)
Person Responsible for Machinery	(General Machinery Regulation 2)
Scaffolding Supervisor	(Construction Regulation 16)
Stacking & Storage Supervisor	(Construction Regulation 28)
Structures Supervisor	(Construction Regulation 11)
Suspended Platform Supervisor	(Construction Regulation 17)
Tunnelling Supervisor	(Construction Regulation 15)
Vessels under Pressure Supervisor	(Vessels under Pressure Regulations)
Working on/next to Water Supervisor	(Construction Regulation 26)
Welding Supervisor	(General Safety Regulation 9)

In addition, Gauteng Provincial Department of Roads and Transport 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 Gauteng Provincial Department of Roads and Transport. All changes shall also be communicated to Gauteng Provincial Department of Roads and Transport.

The principal Contractor shall, furthermore, provide Gauteng Provincial Department of Roads and Transport with an organogram of all Contractors that he has appointed or intends to appoint and keep this list updated and prominently displayed on site. Where necessary, or when instructed by an inspector of the Department of Labour, the principal Contractor shall appoint a competent construction safety officer.

C3.5.2.3.3 Designation of OH&S Representatives (Section 17 of the OH&S Act)

Where the principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-Contractors) he has to appoint one OH&S representatives for every 50 employees or part thereof. 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.

C3.5.2.3.4 Duties and Functions of the OH&S Representatives (Section 18 of the OH&S Act)

The principal Contractor shall ensure that the designated OH&S representatives conduct continuous monitoring and regular inspections of their respective areas of responsibility using a checklist and report thereon to the principal Contractor. OH&S representatives shall be included in accident or incident investigations. OH&S representatives shall attend all OH&S committee meetings.

C3.5.2.3.5 Appointment of OH&S Committee (Sections 19 and 20 of the OH&S Act)

The principal Contractor shall establish an OH&S committee, which shall meet as specified in the Regulations.

C3.5.2.4 Administrative Controls and the Occupational Health & Safety File

C3.5.2.4.1 The OH&S File (Construction Regulation 7 (1b) of 2014)

As required by Construction Regulation 7(1b), the principal Contractor and other Contractors shall each keep an OH&S file on site. The following list is not exhaustive and shall only be used as a guide:

- Notification of construction work (Construction Regulation 4)
- Latest copy of OH&S Act (General Administrative Regulation 4)
- Proof of registration and good standing with COID Insurer (Construction Regulation 4 (g))
- OH&S plan agreed with the Client including the underpinning risk assessment/s and method statements (Construction Regulation 7 (1a))
- Copies of OH&S committee and other relevant minutes
- Designs/drawings (Construction Regulation 7 (1e))
- A list of Contractors (sub-Contractors) including copies of the agreements between the parties and the type of work being done by each Contractor (Construction Regulation 7)
- Appointment/designation forms as per paragraphs C3.5.2.1.1 and C3.5.2.1.2.
- Registers as follows:

    - Accident/Incident register (Annexure 1 of the General Administrative Regulations) - OH&S representatives' inspection register - Asbestos demolition and stripping register
    - Batch plant inspections
    - Construction vehicles and mobile plant inspections by controller
    - Daily inspection of vehicles, plant and other equipment by the operator/driver/user
    - Demolition inspection register
    - Designer's inspection of structures record
    - Electrical installations, -equipment and -appliances (including portable electrical tools)
    - Excavations inspection
    - Explosive powered tool inspection, maintenance, issue and returns register (incl. cartridges and nails)
    - Fall protection inspection register

- First aid box contents
- Fire equipment inspection and maintenance
- Formwork and support work inspections
- Hazardous chemical substances record
- Ladder inspections
- Lifting equipment register
- Materials hoist inspection register
- Machinery safety inspection register (incl. machine guards, lock-outs etc.) - Scaffolding inspections
- Stacking and storage inspection
- Inspection of structures
- Inspection of suspended platforms
- Inspection of tunnelling operations
- Inspection of vessels under pressure
- Welding equipment inspections
- Inspection of work conducted on or near water
- All other applicable records including traffic safety officer reports.

Gauteng Provincial Department of Roads and Transport will conduct an audit on the OH&S file of the principal Contractor from time-to-time.

C3.5.2.5 Notification of Construction Work (Construction Regulation 4, 2014)

The principal Contractor shall, where the contract meets the requirements laid down in Construction Regulation 4, 7 days before works is carried out, notify the Department of Labour of the intention to carry out construction work and use the form (Annexure A in the Construction Regulations) for the purpose. A copy shall be kept on the OH&S file and a copy shall be forwarded to Gauteng Provincial Department of Roads and Transport for record keeping purposes.

C3.5.2.6 Training and Competence

The contents of all training required by the Act and Regulations shall be included in the principal Contractor's OH&S plan. The principal Contractor shall be responsible for ensuring that all relevant training is undertaken. Only accredited service providers shall be used for OH&S training. The principal Contractor shall ensure that his and other Contractors' personnel appointed are competent and that all training required to do the work safely and without risk to health, has been completed before work commences. The principal Contractor shall ensure that follow-up and refresher training is conducted as the contract work progresses and the work situation changes. Records of all training must be kept on the OH&S file for auditing purposes.

C3.5.2.7 Consultations, Communication and Liaison

OH&S liaison between the client, the principal Contractor, the other Contractors, the designer and other concerned parties will be through the OH&S committee as contemplated in paragraph C3.5.2.3.5. In addition to the above, communication may be directly to the client or his appointed agent, verbally or in writing, as and when the need arises.

Consultation with the workforce on OH&S matters will be through their supervisors, OH&S representatives and the OH&S committee. The principal Contractor shall be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the client and the designer, instructions by the client and/or his agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc. The principal Contractors' most senior manager on site shall be required to attend all OH&S meetings.

C3.5.2.8 Checking, Reporting and Corrective Actions

C3.5.2.8.1 Monthly Audit by Client (Construction Regulation 5(1)(n-o))

Gauteng Provincial Department of Roads and Transport will conduct monthly audits to comply with Construction Regulation 5(1)(n-o) to ensure that the principal Contractor has implemented and is maintaining the agreed and approved OH&S plan.

C3.5.2.8.2 Other Audits and Inspections by Gauteng Provincial Department of Roads and Transport

Gauteng Provincial Department of Roads and Transport reserves the right to conduct other ad hoc audits and inspections as deemed necessary. This will include site safety walks.

C3.5.2.8.3 Contractor's Audits and Inspections

The principal Contractor is to conduct his own monthly internal audits to verify compliance with his own OH&S management system as well as of with this specification.

C3.5.2.8.4 Inspections by OH&S Representative's and other Appointees

OH&S representatives shall conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees shall conduct inspections and report thereon as specified in their appointments e.g. vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.

C3.5.2.8.5 Recording and Review of Inspection Results

All the results of the abovementioned inspections shall be in writing, reviewed at OH&S committee meetings, endorsed by the chairman of the meeting and placed on the OH&S File.

C3.5.2.9 Accidents and Incident Investigation (General Administrative Regulation 9)

The principal Contractor shall be responsible for the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to be referred for medical treatment by a doctor, hospital or clinic. The results of the investigation shall be entered into an accident/incident register listed in paragraph C3.5.2.4.1.

The principal Contractor shall be responsible for the investigation of all minor and non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

C3.5.2.10 Reporting

The principal Contractor shall provide Gauteng Provincial Department of Roads and Transport with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring.

C3.5.3 OPERATIONAL CONTROL

C3.5.3.1 Operational Procedures

Each construction activity shall be assessed by the principal Contractor so as to identify operational procedures that will mitigate against the occurrence of an incident during the execution of each activity. This specification requires the principal Contractor:

- to be conversant with Regulations 8 to 29 (inclusive);
- to comply with their provisions; and
- to include them in his OH&S plan where relevant.

C3.5.3.2 Emergency Procedures

Simultaneous with the identification of operational procedures (per paragraph C3.5.3.1 above), the principal Contractor shall similarly identify and formulate emergency procedures in the event an incident does occur. The emergency procedures thus identified shall also be included in the principal Contractor's OH&S plan.

C3.5.3.3 Personal and Other Protective Equipment (Sections 8/15/23 of the OH&S Act)

The Contractor shall identify the hazards in the workplace and deal with them. He must either remove them or, where impracticable, take steps to protect workers and make it possible for them to work safely and without risk to health under hazardous conditions.

Personal protective equipment (PPE) should, however, be the last resort and there should always first be an attempt to apply Engineering and other solutions to mitigating hazardous situations before the issuing of PPE is considered.

Where it is not possible to create an absolutely safe and healthy workplace the Contractor shall inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in a hazardous environment.

It is a further requirement that the Contractor maintains the said equipment, that he instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s. Employees do not have the right to refuse to use/wear the equipment prescribed by the Employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other reason, the employee cannot be allowed to continue working under the hazardous condition/s for which the equipment was prescribed but an alternative solution has to be found that may include relocating or discharging the employee.

The principal Contractor shall include in his OH&S plan the PPE he intends issuing to his employees for use during construction and the sanctions he intends to apply in cases of nonconformance by his employees. Conformance to the wearing of PPE shall be discussed at the weekly inspection meetings.

C3.5.3.4 Other Regulations

Wherever in the Construction Regulations or this specification there is reference to other regulations (e.g Construction Regulation 24: Electrical Installations and Machinery on Construction Sites) the principal Contractor shall be conversant with and shall comply with these regulations.

C3.5.3.5 Public Health and Safety (Section 9 of the OH&S Act)

The principal Contractor shall be responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimise those dangers. This includes:

- Non- employees entering the site for whatever reason
- The surrounding community
- Passers by to the site

C3.5.4 PROJECT/SITE SPECIFIC REQUIREMENTS

C3.5.4.1 List of Risk Assessments

- Clearing and Grubbing of the area/site
- Site establishment including:
  - Office/s
  - Secure/safe storage for materials, plant and equipment

- Ablutions
- Sheltered eating area
- Maintenance workshop
- Vehicle access to the site

- Dealing with existing structures
- Location of existing services
- Installation and maintenance of temporary construction electrical supply, lighting and equipment
- Adjacent land uses/surrounding property exposures
- Boundary and access control/public liability exposures (NB: the Employer is also responsible for the OH&S of non-employees affected by his work activities.)
- Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes and lightning
- Exposure to noise
- Exposure to vibration
- Protection against dehydration and heat exhaustion
- Protection from wet and cold conditions
- Dealing with HIV/Aids and other diseases
- Use of portable electrical equipment including
  - Angle grinder
  - Electrical drilling machine
  - Skill saw
- Excavations including
  - Ground/soil conditions
  - Trenching
  - Shoring
  - Drainage of trench
- Welding including - Arc welding
  - Gas welding
  - Flame cutting
  - Use of LP gas torches and appliances
- Loading and offloading of trucks
- Aggregate/sand and other materials delivery
- Manual and mechanical handling
- Lifting and lowering operations
- Driving and operation of construction vehicles and mobile plant including
  - Trenching machine
  - Excavator
  - Bomag roller
  - Plate compactor
  - Front end loader
  - Mobile cranes and the ancillary lifting tackle
  - Parking of vehicles and mobile plant
  - Towing of vehicles and mobile plant
- Use and storage of flammable liquids and other hazardous substances
- Layering and bedding
- Installation of pipes in trenches
- Pressure testing of pipelines
- Backfilling of trenches
- Protection against flooding
- Gabion work
- Use of explosives
- Protection from overhead power lines
- As discovered by the principal Contractor's hazard identification exercise
- As discovered from any inspections and audits conducted by the client or by the principal Contractor or any other Contractor on site
- As discovered from any accident/incident investigation.

Part C4: SITE INFORMATION

TENDER NUMBER: DRT 31E2/09/2019 EXECUTION OF ROUTINE ROAD MAINTENANCE CONTRACTS ON SELECTED RISFSA CLASS 3 PROVINCIAL ROADS IN IDENTIFIED AREAS OF GAUTENG PROVINCE: PACKAGE E – CONTRACT E2

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C4.1 SITE PLAN

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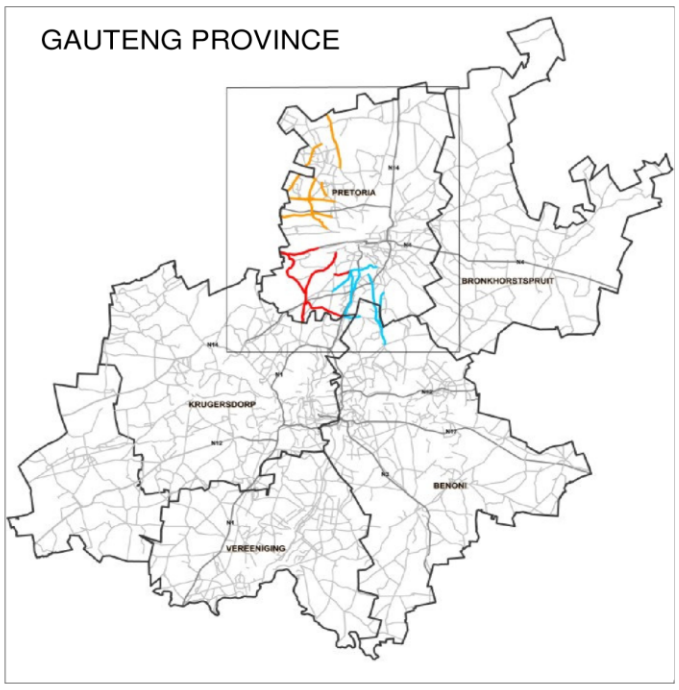
- Contract E3



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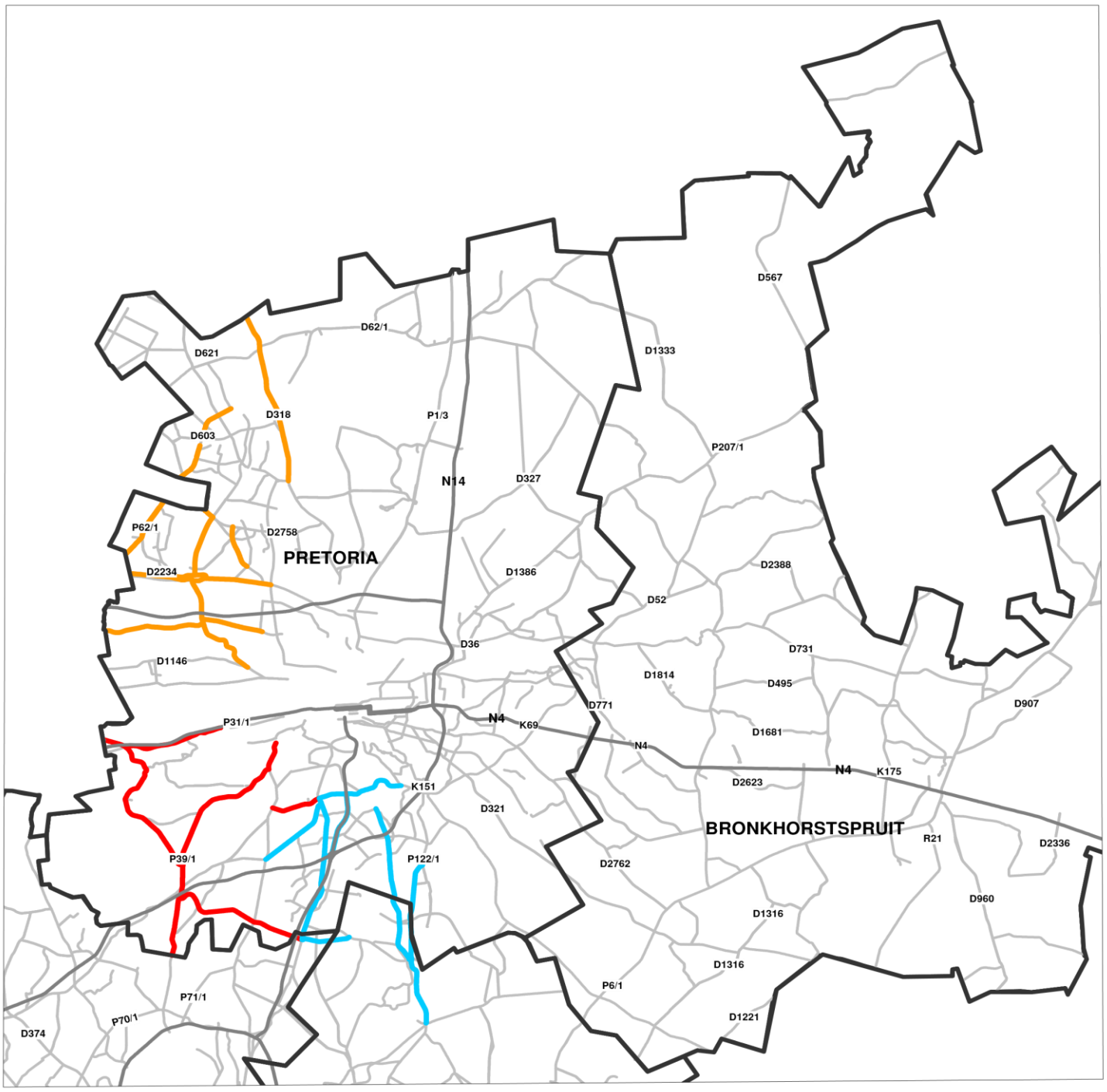

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GAUTENG PROVINCE
Department: Roads and Transport
REPUBLIC OF SOUTH AFRICA

ROUTINE ROAD MAINTENANCE ON ROADS
CONTRACT LAYOUT PLAN

GAUTENG PROVINCIAL ROADS PACKAGE E: RISFSA CLASS 3

Drawn:	LC Gallagher
Checked:	J Naude
Approved:	2013_03_06
Date:	P\Transport\Gauteng Road Mana System.map
Map Ref:	Package A_Class E: RISFSA Class 3
View Ref:	J01462