SANRAL

BUILDING SOUTH AFRICA THROUGH BETTER ROADS

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

CONTRACT SANRAL X.008-004-2026/1F

FOR

CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER , R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

BASE DATE: OCTOBER 2026
VOLUME 1

TENDER DOCUMENT
BOOK 2 of 3

CHIEF EXECUTIVE OFFICER
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED
48 TAMBOTIE AVENUE
VAL DE GRACE
PRETORIA, 0184

NAME OF TENDERER: .....

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

CONTRACT SANRAL X.008-004-2026/1F

CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER, R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

THIS DOCUMENT COMPILED BY:

The Provincial Head Northern Region
The South African National Roads Agency Soc Ltd
48 TAMBOTIE AVENUE
VAL DE GRACE
PRETORIA, 0184

TABLE OF CONTENTS **PAGE**

BOOK 2 OF 3

PART C1: AGREEMENTS & CONTRACT DATA C1-1

PART C1: AGREEMENTS & CONTRACT DATA

Sensitivity - General

SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD

CONTRACT SANRAL X.008-004-2026/1F

CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER, R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

TABLE OF CONTENTS **PAGE**

C1.1 FORMS OF OFFER AND ACCEPTANCE C1-3
C1.1.1 FORM OF OFFER (INCORPORATING SBD7) C1-3
C1.1.2 FORM OF ACCEPTANCE (INCORPORATING SBD7) C1-5
C1.1.3 APPENDIX TO FORM OF ACCEPTANCE C1-8
C1.1.4 FORM OF BANKING DETAILS C1-9
C1.1.5 TAX COMPLIANCE PERMISSION DECLARATION C1-14
C1.2 CONTRACT DATA C1-15
C1.2.1 CONDITIONS OF CONTRACT C1-15
C1.2.2 CONTRACT DATA - INFORMATION PROVIDED BY THE EMPLOYER C1-34
C1.2.3 CONTRACT DATA – INFORMATION PROVIDED BY THE TENDERER C1-38
C1.3 OTHER STANDARD FORMS C1-40
C1.3.1 FORM OF GUARANTEE C1-40
C1.3.2 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993 (ACT NO 85 OF 1993) AND CONSTRUCTION REGULATIONS 2014 ..... C1-42

Notes to tenderer

1. **Should a tenderer wish to offer a different period of completion than that specified by the Employer, it shall be submitted as an alternative offer on a separate Form of Offer.**

2. **If more than one alternative tender is submitted each shall be numbered and submitted on a separate Form of Offer duly completed and signed.**

C1.1 FORMS OF OFFER AND ACCEPTANCE

C1.1.1 FORM OF OFFER (Incorporating SBD7)

Note to tenderer:

If a tenderer submits an alternative offer, but:
- **i) permission was not granted, where applicable: or**
- **ii) a postulated offer is not submitted,**

the tender shall be declared a non-responsive tender offer.

The South African National Roads Agency SOC Limited
PO Box 415
PRETORIA
0001

Sir,

CONTRACT SANRAL X.008-004-2026/1F

CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF THE NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER, R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

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 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 service provider 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.

A. PRICE OFFERED

THE OFFERED TOTAL OF THE PRICES (INCLUSIVE OF VALUE ADDED TAX) BROUGHT FORWARD FROM PART C2.3: PRICING SCHEDULE SUMMARY IS

.....

..... (in words)

(R ..... in figures)

I/we confirm that if any difference between the total of the Pricing Schedule Summary and the amounts stated above exists, the total in the Pricing Schedule Summary shall apply.

B. PREFERENCE CLAIMED

I/we claim the following B-BBEE contributor status level ..... as per Returnable Schedule Form A12: Tenderer's B-BBEE Verification Certificate subject to Tender Data 5.11.8. In the event of any difference between the above stated status level and the Verification Certificate attached to Form A12, the Verification Certificate shall apply.

You may accept this offer by signing and returning to the tenderer one copy of the acceptance part of the forms of offer and 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 service provider 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 deviations or qualifications other than those stipulated in Form A4: Schedule of Deviations or Qualifications by the tenderer and that it is made free from any fraud, corruption and misrepresentation.

Yours faithfully

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

NAME (IN CAPITALS): .....

CAPACITY: .....

Date and minute reference of Board resolution if different from returnable schedule Form A2: Certificate of Authority for signature .....

NAME AND ADDRESS OF ORGANISATION: .....
.....

NAME AND SIGNATURE OF WITNESSES:

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

NAME (IN CAPITALS): .....

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

NAME (IN CAPITALS): .....

C1.1.2 FORM OF ACCEPTANCE (Incorporating SBD7)

FORM OF ACCEPTANCE

To (*Name of successful tenderer)*

Dear Sir,

CONTRACT SANRAL X.008-004-2026/1F

CONSULTING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER, R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

ACCEPTANCE OF OFFER

1. It is our pleasure to inform you that the South African National Roads Agency SOC Ltd (the Employer) accepts your (*select if applicable corrected/corrected alternative/alternative*) offer in the amount of R….. (i.e. including VAT but excluding CPI and any contingent sum not in the priced schedule).

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: Annexure

   together with issued drawings and other documents, or parts thereof, which may be incorporated by reference into Parts C1 to C5 listed above.

4. Deviations and/or qualifications 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, qualifications or changes to the documents.) Addenda issued during the tender period are deemed not to be deviations to the tender documents and schedules.

5. Notwithstanding the need to conclude the agreement contemplated in section 37(2) of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), a pro forma of which is attached, we hereby appoint you in writing as the Client’s agent in terms of regulation 5(5) of the Construction Regulations, 2014, to perform the duties stated in regulations 5(6) and 5(7), and the designer duties in regulation 6 where applicable.

6. In terms of the Employer’s Supply Chain Management (SCM) Policy for Infrastructure Procurement and Delivery Management we hereby appoint you as a member/technical advisor of the following committees:

   (i) Project Document Review Committee and
   (ii) Bid Evaluation Committee (BEC) (Please note that this will be on another SANRAL project).

7. A SARS compliance check has been done on you and you are found to be *(select compliant or non-compliant). (Note to compiler: Check SARS website for compliance. If not compliant add the following sentence:* Within 7 (seven) working days of the date of this Form of Acceptance you shall provide proof that you are SARS compliant. Failure to fulfil this obligation shall constitute a repudiation of this Agreement.)

8. Within 14 calendar days of the date of this Form of Acceptance (including the schedule of deviations if any) you shall deliver to us:

(i) Proof of insurance in terms of the information provided in the Contract Data and clause 5.4 of the General Conditions of Contract. Proof of validity of insured cover shall be provided on a monthly basis until contract completion.
(ii) Completed Form of Banking Details which is attached hereto (Form C.1.1.4).
(iii) Completed Tax Compliance Permission Declaration which is attached hereto (Form C.1.1.5).
(iv) Proof of registration on the Employer's Project Information Module (ITIS).
(v) Proof that your OHS Specialist is registered with the South African Council for Project and Construction Management Professions (SACPCMP) as a **Professional Construction HSE Agent** for the Design Phase and as a **Construction HSE Manager or a Professional Construction HSE Agent** for the Construction Phase.
(vi) Proof that the assistant to the Contracts Engineer (CE) (if applicable) meet the minimum requirements in terms of professional registration and experience as stated in the Scope of Works.
(vii) Copy of the Joint Venture Agreement.

Failure to fulfil this obligation shall constitute a repudiation of this agreement. In addition to any other rights of remedy the service provider shall, if (i) above has not been met, be automatically barred from tendering on any of our future tenders for a period to be determined by us, but not less than twelve (12) months, from the date of tender closure.

9. 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 us in writing of any justification why you cannot accept the contents of this agreement.

10. The commencement date of the performance of the Service shall be that on which the project hand-over meeting is held, which shall not be later than…. (usually 28 calendar days after the date of this form but shall not be later than 30 days – refer Clause 8.1), or earlier if circumstances demand and as agreed between tenderer/employer)

11. The tenderer must register an account on SAP Ariba before the hand-over meeting. The link and information to register the Ariba account is provided below:

https://www.nra.co.za/sap-ariba/

Contact supplierenablement@nra.co.za or procurementNR1@nra.co.za for queries regarding the SAP Ariba registration.

12. 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.

13. The approved Key Person for this project is:

Key Position	**Name**
Contract Engineer (CE)	……
……	……

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

NAME (IN CAPITALS): .....

CAPACITY: **PROVINCIAL HEAD**

EMPLOYER'S NAME AND ADDRESS: **South African National Roads Agency SOC Limited**
48 TAMBOTIE AVENUE
VAL DE GRACE
PRETORIA, 0184

NAME AND SIGNATURE OF WITNESSES:

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

NAME (IN CAPITALS): .....

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

NAME (IN CAPITALS): .....

AUTHORITY TO ACT: SANRAL's Delegation of Powers 2.4.1.2

C1.1.3 APPENDIX TO FORM OF ACCEPTANCE

Schedule of deviations

Notes:

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

The deviations listed below constitute agreed variations/amendments to the tender document negotiated between the tenderer and the employer based on information provided in Form A4: Schedule of Variations or deviations by tenderer or imposed conditions of award. Addenda issued during the tender period are deemed not to be variations to the tender.

1. Subject: .....

   Details: .....

2 Subject: .....

   Details: .....

3 Subject: .....

   Details: .....

4 Subject: .....

   Details: .....

By the duly authorised representatives signing this agreement, the Employer and the tenderer agree to and accept the aforegoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the Employer during this process of offer and acceptance.

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

C1.1.4 FORM OF BANKING DETAILS

Notes to Tenderer:

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:**
   - **a completed SANRAL Vendor Application Form (a copy of the Application Form is provided below).**

SANRAL
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

APPLICATION FOR VENDOR REGISTRATION

Vat Reg: 4220186250

Vendor Name as per Company Registration

.....

Joint Venture (JV)	Yes	NO	*If yes, provide JV agreement

Business Physical Address	**Business Postal Address**
Town/City **Country**: South Africa **Postal Code**:	**Town/City** **Country**: South Africa **Postal Code**:

Tel No.		**Fax No.**	

Company Registration number	**B-BBEE Status Level**

Income Tax Number	**Vat Registration number**

CSD Registration number	**CSD unique** code

THIS SECTION MUST BE COMPLETED FOR ALL ELECTRONIC PAYMENTS

Name of bank

Account number	Account Type
	Current

Branch name	Branch Code

Applicant's Authorisation Officer: PRINT NAME

Applicant's Authorisation Officer: SIGNATURE

The following documentation must be submitted with this form:

1. Full Central Supplier Database (CSD) Report.
2. If a Joint Venture is registered, provide all JV partners CSD Reports.
3. If a Joint Venture is registered, provide the JV agreement.
4. An indemnity letter on your letterhead stating your bank details as per CSD Report (use the pro-forma supplied), in case of a Joint Venture (JV) confirmation of the Leading Partner bank detail or the JV bank detail.
5. B-BBEE Certificate.

All of the above should be e-mailed to the appropriate office as indicated:

	Head Office:procurementho@nra.co.za
X	Northern Region: procurementnr@nra.co.za
	Eastern Region:procurementer@nra.co.za
	Southern Region: procurementsr@nra.co.za
	Western Region: procurementwr@nra.co.za

OFFICIAL USE ONLY

Region:

HO	NR	ER	SR	WR
	X			

Type of vendor:

CONTRACT	SUNDRY	PERSONNEL

Status of vendor:

NEW	CHANGE	BLOCK	UNBLOCK: REASON

AUTHORISING OFFICER REGION:	AUTHORISING OFFICER HO:

VENDOR NUMBER ALLOCATED: **REFER TO EXISTING VENDOR NUMBER**

LETTER

SERVICE PROVIDER'S
LETTER HEAD AND
ADDRESS

Date

The South African National Roads Agency SOC Limited
P O BOX 415
PRETORIA
0001

Attention: Chief Financial Officer

Dear Madam

In consideration of your request to furnish your company with our banking details, we hereby undertake and agree to indemnify SANRAL in full against all consequences, liabilities of any kind whatsoever directly arising from or relating to the said request. This shall include but not limited to any incorrect information/ details provided by us.

We further confirm that the below are ..... 's correct bank account details, as per the attached CSD Report:

Account Name:
Bank:
Branch Name:
Branch Code:
Account No:

Please note that the undersigned is an authorised signatory of the company.

Kind Regards

Signature _____
Name:
Designation:
ID number:

C1.1.5 TAX COMPLIANCE PERMISSION DECLARATION

Note to Tenderer:

In terms of National Treasury Instruction No. 9 of 2017/2018, read with the Public Finance Management Act, 1999 (Act No. 1 of 1999), and the Treasury Regulations, the Service Provider and its sub-contractors shall provide the Employer with the information and authority required to verify their tax compliance status through the SARS Tax Compliance Status system for the duration of the Contract.

The Service Provider shall complete the declaration below.

I, ... (name) the undersigned in my capacity as ..... (position) on behalf of ..... (name of company) herewith grant consent that SARS may disclose to the South African National Roads Agency SOC Limited (SANRAL) our tax compliance status on an ongoing basis for the contract term.

For this purpose our unique security personal identification number (PIN) is .....

In addition, the Service Provider shall obtain written consent from each of its sub-contractors, undisclosed principals and partners involved in this contract confirming that SARS may, on an ongoing basis during the contract term disclose the sub-contractors' tax compliance status to the Employer. For this purpose the Service Provider shall provide the Employer with the unique security personal identification number (PIN) for each of its sub-contractors, undisclosed principals and partners involved in this contract.

In the event of a Joint Venture (JV) or a Targeted Enterprise each member shall comply with the above requirement.

..... **.....**

SIGNATURE **DATE**

C1.2 CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

Note to tenderer:

1. **The legislated Standard Conditions of Contract for Professional Services (as published and amended from time to time by the Construction Industry Development Board) are included together with SANRAL's special conditions of contract where the former is shown in standard format and SANRAL's amendments (i.e. special conditions) shown in italics. SANRAL's special conditions of contract are shown in italics as amending clauses of the Standard Conditions.**

TABLE OF CONTENTS **PAGE**

1.	DEFINITIONS	C1-17
2.	INTERPRETATION	C1-19
3.	GENERAL	C1-19
3.1	GOVERNING LAW	C1-19
3.2	CHANGE IN LEGISLATION	C1-19
3.3	LANGUAGE	C1-20
3.4	NOTICES	C1-20
3.5	LOCATION	C1-20
3.6	PUBLICITY AND PUBLICATION	C1-20
3.7	CONFIDENTIALITY	C1-20
3.8	VARIATIONS	C1-20
3.9	SOLE AGREEMENT	C1-20
3.10	INDEMNIFICATION	C1-21
3.11	PENALTY	C1-21
3.12	EQUIPMENT AND MATERIALS FURNISHED BY THE EMPLOYER	C1-21
3.13	ILLEGAL AND IMPOSSIBLE REQUIREMENTS	C1-21
3.14	PROGRAMME	C1-21
3.15	SEVERABILITY	C1-22
3.16	WAIVER	C1-22
4.	EMPLOYER'S OBLIGATIONS	C1-22
4.1	INFORMATION	C1-22
4.2	DECISIONS	C1-22
4.3	ASSISTANCE	C1-22
4.4	SERVICES OF OTHERS	C1-23
4.5	NOTICE OF CHANGE BY EMPLOYER	C1-23
4.6	ISSUE OF INSTRUCTIONS	C1-23
4.7	PAYMENT OF SERVICE PROVIDER	C1-23
5.	SERVICE PROVIDER'S OBLIGATIONS	C1-23
5.1	GENERAL	C1-23
5.2	EXERCISE OF AUTHORITY	C1-23
5.3	DESIGNATED REPRESENTATIVE	C1-24
5.4	INSURANCES TO BE TAKEN OUT BY THE SERVICE PROVIDER	C1-24
5.5	SERVICE PROVIDER'S ACTIONS REQUIRING EMPLOYER'S PRIOR APPROVAL	C1-24
5.6	CO-OPERATION WITH OTHERS	C1-24
5.7	NOTICE OF CHANGE BY SERVICE PROVIDER	C1-24
5.8	SAFEGUARDING THE EMPLOYER'S DATA	C1-24
5.9	PERFORMANCE SECURITY (NOT RECOMMENDED)	C1-24
6.	CONFLICTS OF INTEREST, *CORRUPTION AND FRAUD*	C1-25
6.1	SERVICE PROVIDER NOT TO BENEFIT FROM COMMISSIONS, DISCOUNTS, ETC.	C1-25
6.2	ROYALTIES AND THE LIKE	C1-25
6.3	INDEPENDENCE	C1-25
6.4	CORRUPTION AND FRAUD	C1-25

7. SERVICE PROVIDER'S PERSONNEL C1-26
7.1 PROVISION OF PERSONNEL C1-26
7.2 STAFF AND EQUIPMENT C1-26
7.3 WORKING HOURS, OVERTIME AND LEAVE C1-26
8. COMMENCEMENT, COMPLETION, MODIFICATION SUSPENSION AND TERMINATION OF THE CONTRACT C1-27
8.1 COMMENCEMENT C1-27
8.2 COMPLETION C1-27
8.3 FORCE MAJEURE C1-27
8.4 TERMINATION C1-28
8.5 SUSPENSION C1-29
8.6 RIGHTS AND LIABILITIES OF THE PARTIES C1-29
9. OWNERSHIP OF DOCUMENTS AND COPYRIGHT C1-29
10. SUCCESSION AND ASSIGNMENT C1-29
11. SUBCONTRACTING C1-29
12. RESOLUTION OF DISPUTES C1-30
12.1 SETTLEMENT C1-30
12.2 MEDIATION C1-30
12.3 ADJUDICATION C1-31
12.4 ARBITRATION C1-31
13. LIABILITY C1-31
13.1 LIABILITY OF THE SERVICE PROVIDER C1-31
13.2 LIABILITY OF THE EMPLOYER C1-31
13.3 COMPENSATION C1-31
13.4 DURATION OF LIABILITY C1-32
13.5 LIMIT OF COMPENSATION C1-32
13.6 INDEMNITY BY THE EMPLOYER C1-32
13.7 EXCEPTIONS C1-32
14. REMUNERATION AND REIMBURSEMENT OF SERVICE PROVIDER C1-32

CONDITIONS OF CONTRACT

1. DEFINITIONS

In the Contract, the following words and expressions shall have the meanings indicated, except where the context otherwise requires. Defined terms and words are signified in the text of the Contract by the use of capital initial letters.

Agent
The Service Provider appointed in terms of the Occupational Health and Safety Act No. 85 of 1993, including the relevant Regulations.

Black People
Black people has the meaning assigned to it in Section 1 of the Broad-Based Black Economic Empowerment Act, 2003 (Act No 53 of 2003).

Construction monitoring/ supervision
The process of managing and co-ordinating the Works Contract and over-seeing and/or inspecting the Works in accordance with the Employer's requirements.

Consulting Engineering Firm
A natural person or legal entity which provides independent technology-based intellectual services in the built, human and natural environment to clients for a fee, and does not engage in or is not a subsidiary or holding company that engages in manufacturing or construction and is not in substance owned by the State or a similar public body or is not in substance the design department of a development, manufacturing or construction enterprise.

Contract
The Contract signed by the Parties and of which these General Conditions of Contract form part.

Contract Data
Specific data, which together with these General Conditions of Contract, collectively describe the risks, liabilities and obligations of the contracting Parties and the procedures for the administration of the contract.

Contract Footprint
The roads, road sections, road reserves, SANRAL properties and related assets identified in the Scope of Work, together with any Transferred Road added by written instruction under the Contract.

Emergency Event
Any actual or imminent event on or affecting the Contract Footprint that threatens life, health, property, the environment, road safety or continuity of the road network and requires urgent coordination, traffic management, inspection, reporting or remedial action.

Emergency Response Plan
The project-specific, all-hazards plan prepared and maintained by the Service Provider for 24-hour incident notification, mobilisation, coordination, traffic accommodation, emergency works, reporting, recovery and post-incident review.

Contractor
The contracting party named as contractor in the letter of tender of the Works Contract accepted by the Employer.

Contract Price
The price to be paid for the performance of the Services in accordance with the Pricing Data.

Day
A calendar day.

Defect
A part of the Services, as performed, which does not comply with the requirements of the Contract.

Deliverable
Any measurable, tangible, verifiable outcome, result or item that must be produced or completed.

EME
EME is 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 Empowerment Act, 2003 (Act No 53 of 2003).

Employer
The contracting party named in the Contract who employs the Service Provider.

Engineer
The natural or juristic person, partnership, Incorporated Company, Proprietary Limited Company or Close Corporation appointed in writing by the Employer for the construction monitoring and management of the engineering Works undertaken by the Contractor.

Force Majeure
"For the purpose of this Contract the expression 'Force Majeure' shall mean an event or circumstance described in clause 8.3.1.

Key Persons
Persons who are named as such in the Contract Data who will be engaged in the performance of the Services.

Others
Persons or organizations who are not the Employer, the Service Provider or any employee, Sub-contractor, or supplier of the Service Provider.

Parties
The Employer and the Service Provider.

People with Disabilities
People with Disabilities has the meaning assigned to it in Section 1 of the Employment Equity Act, 1998 (Act No 55 of 1998).

Period of Performance
The period within which the Services are to be performed and completed.

Personnel
Persons hired by the Service Provider as employees and assigned to the performance of the Services or any part thereof.

Permanent Staff Member
A person hired for an indefinite period, meaning there is no predetermined end date for their employment. All regulatory/statutory deductions shall apply to this person.

Personnel Schedule
A schedule naming all personnel and key persons.

Pricing Data
Data that establishes the criteria and assumptions that were taken into account when developing the Contract Price and the record of the components that make up of the Contract Price.

Project
The project named in the Contract Data for which the Services are to be provided.

Public Official
a) Any official or employee of any government department and/or state-owned entity;
b) Any person performing a public function;
c) Any official or employee of a public international organisation including without limitation donor or funding agencies or the Employer;
d) Any candidate for political office; or
e) Any political party or an official of a political party.

QSE

QSE is 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, 2003 (Act No 53 of 2003).

Scope of Work
The document which defines the Employer's objectives and requirements and specifies the Services which must, or may, be provided under the Contract.

Service Provider
The contracting party named in the Contract Data who is employed by the Employer to perform the Services described in the Contract, and legal successors to the Service Provider and legally permitted assignees.

Services
The work to be performed by the Service Provider pursuant to the Contract as described in the Scope of Work.

Sub-contractor
A person or body corporate who enters into a sub-contract with the Service Provider to perform part of the Services.

Targeted Enterprise

A Consulting Engineering Firm who is an EME (BEP)* or QSE (BEP)*, contracted by the Service Provider to perform a tendered percentage of work stated in the Contract Data under his guidance and which complies with the following:

a) is at least 51% owned by black people: and
b) has a B-BBEE status* of "level one or level two contributor'; and
c) does not share equity holding with the Service Provider; and
d) is registered in terms of the Companies Act, 2008 (Act No. 71 of 2008) or Close Corporation Act, 1984 (Act No. 69 of 1984); and
e) is registered on the National Treasury's Central Supplier Database (CSD).

* NOTE: All references to EME, QSE, B-BBEE status are in terms of the amended Construction Sector Codes published in Notice 931 of 2017 in Government Gazette No 41287 on 1 December 2017.

Technical Proposal
The Key Persons proposed by the Service Provider to undertake the respective functions/duties as defined under the Contract.

Transferred Road
A provincial or other public road, road section or related asset that is declared or incorporated into the national road network and is formally handed over to SANRAL, or that the Employer instructs the Service Provider in writing to assess or manage pending such transfer, subject to the Contract's variation and payment provisions.

Works or Works Contract
That project or part of a project that the employer wishes to have delivered and for which the service provider has been appointed for the performance of the services specified in this contract.

Youth
For purposes of this contract, Youth means persons between the ages of 16 and 35.

2. INTERPRETATION

2.1 Unless inconsistent with the context, an expression which denotes:
a) any gender includes the other genders;
b) a natural person includes a juristic person and vice versa;
c) the singular includes the plural and vice versa.

2.2 *The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of documents shall be in accordance with the following sequence:*
a) the Form of Acceptance
b) the Form of Offer
c) the Contract Data
d) the General Conditions of Contract
e) the Scope of Work
f) the Pricing Schedule and any other documents forming part of the Contract.

2.3 If there is any conflict between the provisions of these General Conditions of Contract and the Contract Data, the provisions of the Contract Data shall prevail.

2.4 The clause headings shall not limit, alter or affect the meaning of the Contract.

3. GENERAL

3.1 Governing laws

"Law" means all national (or other spheres of Government) legislation, statutes, ordinances and other laws including the South African Common Law, and regulations and by-laws of any legally constituted public authority.

3.2 Change in legislation

If after the commencement of the Contract, the cost or duration of the Services is altered as a result of changes in, or additions to, any statute, regulation or bye-law, or the requirements of any authority having jurisdiction over any matter in respect of the Project, then the Contract Price and time for completion shall be adjusted in order to reflect the impact of those changes, provided that, within 14 days of first having become aware of the change, the Service Provider furnished the Employer with detailed justification for the adjustment to the Contract Price.

3.3 Language

3.3.1 The language of the Contract and of all communications between the Parties shall be English.

3.3.2 All reports, recommendations and reports prepared by the Service Provider under the Contract shall be in English.

3.4 Notices

3.4.1 Any notice, request, consent or other communication under the Contract shall be in writing and delivered by hand, courier, registered post or email to the address stated in the Contract Data. A hand or courier delivery is effective when acknowledged at that address; registered post is effective seven (7) days after posting; and email is effective when transmitted without a delivery-failure notice, provided that a notice of default, termination or dispute is also delivered by hand, courier or registered post.

3.4.2 If the sender requires evidence of receipt, he shall state such requirement in his communication and, wherever there is deadline for the receipt of the communication, he may demand evidence of receipt of his communication. In any event, the sender shall take all the necessary measures to ensure receipt of communications.

3.4.3 A Party may change its address for receipt of communications by giving the other Party 30 days advance notice of such change.

3.5 Location

The Services shall be performed at such locations as are specified in the Contract Data, and where the location of a particular task is not so specified, at such locations as the Employer may approve.

3.6 Publicity and publication

Unless otherwise agreed, the Service Provider shall not release public or media statements or publish material related to the Services or Project within two (2) years of completion of the Services without the written approval of the Employer, which approval shall not be unreasonably withheld.

3.7 Confidentiality

Both Parties shall keep all commercially sensitive information obtained by them in the context of the Contract confidential and shall not divulge it without the written approval of the other Party except to the *extent strictly necessary to carry out obligations under this Contract or to comply with applicable laws.*

3.8 Variations

3.8.1 The Employer may, without changing the objectives or fundamental scope of the Contract, order variations to the Services or may request the Service Provider to submit proposals, including the time and cost implications, for variations to the Services. *No variation shall have any force or effect unless reduced to writing and signed by both Parties.*

3.8.2 The reasonable cost of preparation and submission of such proposals and the incorporation into the Contract of any variations to the Services ordered by the Employer, including any change in the Contract Price, shall be agreed in writing between the Service Provider and the Employer, *prior to the change being implemented.*

3.8.3 Where a variation is necessitated by default or breach of Contract by the Service Provider, any additional cost attributable to such variation shall be borne by the Service Provider.

3.9 Sole agreement

The Contract constitutes the sole agreement between the Parties for the performance of the Services and no representation not contained therein shall be of any force or effect. No amendments will be of any force or effect unless reduced to writing and signed by both Parties.

3.10 Indemnification

The Service Provider shall, at his own expense, indemnify, protect and defend the Employer, its agents and employees, from and against all actions, claims, losses and damage arising from any *wilful or* negligent act or omission by the Service Provider *or his sub-contractors* in the performance of the Services, including any violation of legal provisions, or rights of others, in respect of patents, trademarks and other forms of intellectual property such as copyrights.

3.11 Penalty

3.11.1 In the event that due to his negligence, or for reasons within his control, the Service Provider does not perform the Services within the Period of Performance, the Employer shall without prejudice to his other remedies under the Contract, be entitled to levy a penalty for every day or part thereof, which shall elapse between the end of the period specified for performance, or an extended Period of Performance, and the actual date of completion, at the rate and up to the maximum amount stated in the Contract Data.

3.11.2 If the Employer has become entitled to the maximum penalty amount referred to in 3.11.1, he may after giving notice to the Service Provider:

a) terminate the Contract
b) complete the Services at the Service Provider's cost.

3.11.3 In the event that due to his negligence or for reasons within his control, the Service Provider does not disclose sub-contracting arrangements, the Employer may be entitled to levy a penalty as stated in the Contract Data.

3.11.4 In the event that due to his negligence or for reasons within his control, the Service Provider does not perform the service of capturing structures inventory updates, the Employer shall be entitled to levy a penalty as stated in the Contract Data.

3.11.5 In the event that the draft documentation and/or design is of sub-standard/poor quality, the Employer shall be entitled to levy a penalty for the additional time spent by the Employer to correct the

documentation and/or design to the required acceptable standard at the hourly tariffs as specified under Additional Duties.

3.12 Equipment and materials furnished by the Employer

3.12.1 Equipment and materials made available to the Service Provider by the Employer, or purchased by the Service Provider with funds provided by the Employer for the performance of the Services shall be the property of the Employer and shall be marked accordingly. Upon termination or expiration of the Contract, the Service Provider shall make available to the Employer an inventory of such equipment and materials and shall dispose of them in accordance with the Employer's instructions.

3.12.2 *Unless otherwise stated in the Contract Data*, the Service Provider shall, at his own expense, insure the equipment and materials referred to in 3.12.1 for their full replacement value.

3.13 Illegal and impossible requirements

The Service Provider shall notify the Employer immediately, should he become aware that the Contract requires him to undertake anything which is illegal or impossible.

3.14 Programme

3.14.1 The Service Provider shall, within the time period set out in the Contract Data, submit to the Employer a programme for the performance of the Services which shall, *inter alia*, include:

a) the order and timing of operations by the Service Provider and any actions required of the Employer and Others;
b) the dates by which the Service Provider plans to complete work needed to allow the Employer and Others to undertake work required of them; and
c) other information as required in terms of the Scope of Work or Contract Data.

3.14.2 The Employer may, during the course of the Contract, request the Service Provider to amend the programme. Where this is not practicable, the Service Provider shall advise the Employer accordingly and advise him of alternative measures, if any, which might be taken.

3.14.3 The Service Provider shall regularly update the programme to reflect actual progress to date and expected future progress.

3.15 Severability

If a court of competent jurisdiction holds that any provision of this Contract is severable by reason of it being invalid, illegal, unlawful or unenforceable and as a consequence of which prevents the accomplishment of the purpose of this Contract, the Employer and the Service Provider shall meet and review the matter to adopt means to fulfil the purpose of the Contract.

3.16 Waiver

No defence of a waiver of any of the provisions of this contract shall be effective unless it is expressly stated in writing, by the Party against whom such defence is raised, to be a waiver of such provisions and is communicated to the other Party in writing in accordance with the provisions of Clause 3.4.

4. EMPLOYER'S OBLIGATIONS

4.1 Information

4.1.1 The Employer shall timeously provide to the Service Provider, free of cost, all available information and data in the Employer's possession which may be required for the performance of the Services.

4.1.2 The Employer shall provide the Service Provider with any assistance required in obtaining other relevant information that the latter may require in order to perform the Services.

4.1.3 The Service Provider shall be entitled to rely on the accuracy and completeness of all information furnished by or on behalf of the Employer.

4.2 Decisions

The Employer shall, within a reasonable time, give his decision on any matter properly referred to him in writing by the Service Provider so as not to delay the performance of Services.

4.3 Assistance

The Employer shall co-operate with the Service Provider and shall not interfere with or obstruct the proper performance of the Services. The Employer shall as soon as practicable:

4.3.1 authorise the Service Provider to act as his agent insofar as may be necessary for the performance of the Services;

4.3.2 provide all relevant data, information, reports, correspondence and the like, which become available;

4.3.3 procure the Service Provider's ready access to premises, or sites, necessary for the performance of the Services;

4.3.4 assist in the seeking of all approvals, licenses and permits from state, regional and municipal authorities having jurisdiction over the Project, unless otherwise stated in the Contract Data;

4.3.5 designate in writing a person to act with his complete authority in giving instructions and receiving communications on his behalf and interpreting and defining his policies and requirements in regard to the Services.

4.4 Services of Others

4.4.1 The Employer shall, at his own cost, engage such Others as may be necessary for the execution of work necessary for the completion of the Project, but not included in the Services.

4.4.2 The Employer shall not enter into an agreement or contract with Others which describes any of the duties and responsibilities of the Service Provider in terms of the Contract or which imposes obligations on him, without first obtaining the Service Provider's written agreement thereto.

4.5 Notice of change by Employer

On becoming aware of any matter which will materially change, or has changed, the scope, cost or timing of the Services, or on becoming aware of any defect or deficiency in the Services, the Employer shall immediately advise the Service Provider thereof.

4.6 Issue of instructions

Where the Service Provider is required to administer the work or services of Others, or any contract or agreement, on behalf of the Employer, then the Employer shall issue instructions related to such work, services, contract or agreement only through the Service Provider.

4.7 Payment of Service Provider

The Employer shall pay the Service Provider the Contract Price in accordance with the provisions of the Contract.

5. SERVICE PROVIDER'S OBLIGATIONS

5.1 General

5.1.1 The Service Provider shall perform the Services in accordance with the Scope of Work with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards *and shall be responsible for breach of professional duty by reason of any error, omission or neglect in connection with delivering the services*

5.1.2 Where the Services include the exercise of powers to certify, decide or otherwise exercise discretion in regard to a contract or agreement between the Employer and Others, then the Service Provider shall act in respect of that contract or agreement as an independent professional

5.1.3 If the Service Provider is a joint venture or consortium of two or more persons, the Service Provider shall designate one person to act as leader with authority to bind the joint venture or consortium.

Neither the composition nor the constitution of the joint venture or consortium shall be altered without the prior consent in writing of the Employer, which shall not be unreasonably withheld.

5.1.4 Unless otherwise instructed in writing, the Service Provider is appointed as the Employer's mandatary for the purposes of section 37(2) of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), and as the Client's agent in terms of regulation 5(5) of the Construction Regulations, 2014. The Service Provider shall perform the duties in regulations 5(6) and 5(7), and the designer duties in regulation 6 where applicable.

5.1.5 The Service Provider, if requested by the Employer, shall provide any plans and calculations for checking by Others.

5.1.6 All design calculations shall be kept and safeguarded for the duration of the insurance(s) required in terms of clause 5.4.1.

5.2 Exercise of authority

5.2.1 The Service Provider shall have no authority to relieve Others appointed by the Employer to undertake work on the Project of any of their duties, obligations, or responsibilities under their respective agreements or contracts, unless expressly authorised by the Employer in response to an application by the Service Provider in writing to do so.

5.2.2 Whenever necessary to enter upon land for the performance of the Contract the service Provider shall do so in accordance with the provisions of the SANRAL Act, (Act 7 of 1998) and shall indemnify the Employer from all costs arising from any transgression committed by the Service Provider.

5.3 Designated representative

The Service Provider shall designate in writing a person to act as his representative and such person shall have complete authority to receive instructions from and give information to the Employer on behalf of the Service Provider.

5.4 Insurances to be taken out by the Service Provider

5.4.1 The Service Provider shall, at his own cost, unless otherwise agreed, take out and maintain in force such insurance policies in respect of their own risks in performing the Services as are stipulated in the Contract Data, subject to the approval of the Employer, which approved shall not be unreasonably withheld.

5.4.2 The Service Provider shall, at the Employer's request, provide evidence to the Employer showing that the insurance required in terms of Clause 5.4.1 has been taken out *with an insurance company registered in the Republic of South Africa, or as otherwise approved by the Employer* and maintained in force.

5.5 Service Provider's actions requiring Employer's prior approval

The Service Provider shall obtain the Employer's prior approval in writing before taking, inter alia, any of the following actions:

a) appointing Sub-contractors for the performance of any part of the Services,
b) appointing Key Persons not listed by name in the Contract Data.
c) any other action that may be specified in the Contract Data.

5.6 Co-operation with Others

If the Service Provider is required to perform the Services in co-operation with Others he may make recommendations to the Employer in respect of the appointment of such Others. The Service Provider shall, however, only be responsible for his own performance and the performance of sub-contractors unless otherwise provided for.

5.7 Notice of change by Service Provider

On becoming aware of any matter which will materially change or has changed the scope, cost or timing of the Services, the Service Provider shall give notice thereof to the Employer, save that the Service Provider is empowered to make minor changes or variations within the overall programme or

budget and within such parameters as are defined by the Employer, provided that such changes are reported timeously to the Employer.

5.8 Safeguarding the Employer's data

5.8.1 The Parties shall take reasonable precautions (each having regard to the nature of the other's respective obligations under the Contract) to preserve the integrity of the Employer's data including appropriate back-up procedures.

5.8.2 In the event that the Employer's data is corrupted or lost as a result of any default by the Service Provider, the Employer shall at the Service Provider's expense, have the option to:

- *require the Service Provider to restore or procure the restoration of such data; or;*
- *itself restore or procure restoration of such data.*

5.8.3 The Service Provider shall process personal information and protect Employer data in accordance with the Protection of Personal Information Act, 2013 (Act No. 4 of 2013), applicable cybersecurity requirements and the Employer's information-security policies. Access shall be limited to authorised persons, information shall be used only for the Contract, and any actual or suspected loss, unauthorised access or security compromise shall be reported to the Employer immediately. On completion or termination, the Service Provider shall return or securely destroy information as instructed, subject to lawful record-retention requirements.

5.9 Performance Security

Where required, the Service Provider shall obtain (at his cost) a Performance Security for proper performance in the amount and currencies stated in the Contract Data. If an amount is not stated in the Contract Data, this sub-clause shall not apply.

The Service Provider 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 an insurance company or bank registered or licensed as an insurance company or bank 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.

6. CONFLICTS OF INTEREST, *CORRUPTION AND FRAUD*

6.1 Service Provider not to benefit from commissions, discounts, etc.

The remuneration of the Service Provider under the Contract shall constitute the Service Provider's sole remuneration in connection with the Contract, or the Services, and the Service Provider shall not accept for his own benefit any trade commission, discount, or similar payment in connection with activities pursuant to the Contract, or in the discharge of his obligations under the Contract, and shall use his best efforts to ensure that the Personnel, any Sub-contractors, and agents of either of them shall, similarly, not receive any additional remuneration.

6.2 Royalties and the like

The Service Provider shall not have the benefit, whether directly or indirectly, of any royalty or of any gratuity or commission in respect of any patented or protected article or process used in or for the purposes of the Contract, or Project, unless so agreed by the Employer in writing.

6.3 Independence

The Service Provider shall refrain from entering into any relationship which could be perceived as compromising his independence of judgment, or that of Subcontractors or Personnel.

6.4 Corruption and Fraud

6.4.1 The Service Provider shall neither:

(a) Offer or give or agree to give any person of the Employer any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forebore to do any act in relation to the obtaining or performance of this contract or any other contract with the

Employer or for showing or forbearing to show favour or disfavour to any person in relation to this contract; nor

(b) Enter into this contract if in connection with it commission or a reward of any type has been paid, offered or agreed to be paid to any person of the Employer by the Service Provider or on his behalf or knowledge.

6.4.2 In the event that the Employer, in good faith and on reasonable grounds, comes to the opinion, that a breach of any of the provisions of Clause 6.4.1 has been perpetrated by the Service Provider or anyone employed by him or acting on his behalf in relation to this contract or any other agreement with the Employer, the Employer may:

(a) summarily suspend the operation of this Contract by notice in writing to the Service Provider, informing him of the Employer's opinion and the grounds and reasons upon which it is based, and calling upon the Service Provider to show cause, in writing, within fourteen (14) days of receipt of the written notice why the Employer should not terminate this Contract on the grounds of the alleged breach(es) of Clause 6.4.1 of this Contract;

(b) withhold all payments due;

(c) terminate this Contract by notice in writing to the Service Provider, if the Service Provider fails to respond to the Employer's written response, to satisfy the Employer that his opinion is unfounded. Provided always that such termination shall not prejudice or affect any right of action or remedy, which shall have accrued or shall accrue thereafter to the Employer and provided also that the Employer may recover from the Service Provider such sum as the Employer deems equivalent to the amount or value of any such gift, consideration or commission.

6.4.3 In the event that the Employer, in good faith and on reasonable grounds, comes to the opinion that any contract with a Government or public sector body has been or was obtained by the Service Provider through actions that mutatis mutandis are similar in nature to those barred in terms of Clause 6.4.2 by the Service Provider or by anyone employed by the Service Provider or acting on the Service Provider's behalf in relation to such Contract, the Employer may:

(a) summarily suspend the operation of this Contract by notice in writing to the Service Provider, informing him of the Employer's opinion and the grounds and reasons upon which it is based, and calling upon the Service Provider to show cause, in writing within fourteen (14) days of receipt of the written notice why the Employer should not terminate this Contract on the grounds of the alleged breach(es) of Clause 6.4.1 of this contract;

(b) withholds all payments due

(c) terminate this Contract by notice in writing to the Service Provider, if the Service Provider fails to respond to the Employer's written notice within the prescribed time, or fails, in his written response, to satisfy the Employer that this opinion is unfounded. Provided always that such termination shall not prejudice or affect any right of action or remedy, which shall have accrued or shall accrue thereafter to the Employer.

7. SERVICE PROVIDER'S PERSONNEL

7.1 Provision of Personnel

7.1.1 The Service Provider shall provide appropriate Personnel for such time periods as required in terms of the Contract and shall enter all data pertaining to Personnel including titles, job descriptions, qualifications and estimated periods of engagement on the performance of the Services in the Personnel Schedule.

7.1.2 The Services shall be performed by the Personnel listed in the Personnel Schedule for the periods of time indicated therein. The Service Provider may, subject to the approval of the Employer, make such adjustments to the data provided in terms of Clause 7.1.1 above as may be appropriate to ensure the efficient performance of the Services, provided that the adjustments will not cause payments to exceed any limit placed on the Contract Price.

7.1.3 The Service Provider shall:

(a) forward to the Employer for approval, within 15 days of the award of the Contract, the Personnel Schedule and a timetable for the placement of Personnel.

(b) inform the Employer of the date of commencement and departure of each member of Personnel during the course of the Project.

(c) submit to the Employer for his approval a timely request for any proposed change to Personnel, or timetables.

7.2 Staff and equipment

7.2.1 The Service Provider shall employ and provide all qualified and experienced Personnel required to perform the Services.

7.2.2 Where required in terms of the Contract, the Service Provider shall provide Key Persons as listed in the Contract Data to perform specific duties. If at any time, a particular Key Person cannot be made available, the Service Provider may engage a replacement who is equally or better qualified to perform the stated duty, subject to the Employer's approval, which approval shall not be unreasonably withheld.

7.2.3 Where the Service Provider proposes to utilise a person not named in the Personnel Schedule, he shall submit the name, relevant qualifications and experience of the proposed replacement person to the Employer for approval.

7.2.4 Where the fees for the Services are time-based, the fee payable for a person provided as a replacement shall not exceed that which would have been payable to the person replaced.

7.2.5 Except in the case of replacement resulting from death or where the Employer requests a replacement not provided for by the Contract, the Service Provider shall bear all additional costs arising out of or incidental to such replacement.

7.2.6 The Service Provider shall take all measures necessary and shall provide all materials and equipment necessary to enable Personnel to perform their duties in an efficient manner.

7.3 Working hours, overtime and leave

Where the fee for the Services are time-based, working hours, leave entitlement and holidays for Personnel provided in terms of Clause 7 are to be as stated in the Contract Data, or, if not stated, to be determined by the Service Provider. The Employer will not be responsible for overtime payments to Personnel *unless so specifically provided for in the Pricing Schedule*.

8. COMMENCEMENT, COMPLETION, MODIFICATION SUSPENSION AND TERMINATION OF THE CONTRACT

8.1 Commencement

The effective date of the contract shall be the date of the Form of Acceptance.

The Contract shall come into effect on the date that it is signed by both Parties or such later date as may be stated in the Contract Data. The Service Provider shall commence the performance of the Services within thirty (30) days after the date that the Contract becomes effective, or such date as may be specified in the Contract Data. The supervision phase shall commence on the date confirmed by the Employer at the Works Contract hand-over meeting.

8.2 Completion

8.2.1 Unless terminated in terms of the Contract, or otherwise specified in the Contract Data, the Contract shall be concluded when the Service Provider has completed all Deliverables in accordance with the Scope of Work.

8.2.2 The Service Provider, may request an extension to the Period of Performance if he is or will be delayed in completing the Contract by any of the following causes:

a) *variations to* Services ordered by the Employer.
b) failure of the Employer to fulfil his obligations under the Contract.
c) any delay in the performance of the Services which is not due to the Service Provider's default.
d) *Force Majeure*

8.2.3 The Service Provider shall within 14 days of becoming aware that a delay may occur, notify the Employer of his intention to make a request for the extension of the Period of Performance to which he considers himself entitled and shall within 30 days thereafter deliver to the Employer full and detailed particulars of the request, in order that it may be investigated at the time.

8.2.4 The Employer shall, within 30 days of receipt of a detailed request, grant such extension to the Period of Performance as may be justified, either prospectively or retrospectively, or inform the Service Provider that he is not entitled to an extension. Should the Service Provider find the decision of the Employer to be unacceptable he shall, nevertheless, abide by such decision in the performance of the services and the matter shall be dealt with as a dispute in terms of Clause 12.

8.3 Force Majeure

8.3.1 In this clause "Force Majeure" means an exceptional event or circumstance:

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

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below;

(i) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity
(ii) war, hostilities (whether war to be declared or not), invasion, act of foreign enemies,
(iii) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war,
(iv) riot, commotion, disorder, strike or lockout by persons other than the Service Provider's Personnel or other employees of the Service Provider and Sub-contractors,

An event or circumstance which is attributable to a wilful act, neglect or failure to take reasonable precautions by the affected party, his employees agents, sub-contractors or others shall, under no circumstances, be considered Force Majeure.

8.3.2 The failure of a Party to fulfil any of its obligations under the Contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of *Force Majeure*, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures in order to meet the terms and conditions of this Contract, and has *notified* the other Party within 10 days of its occurrence and within a reasonable time of *its estimated duration and consequences. Failure to so notify shall terminate that Party's right to release from his obligations.*

8.3.3 In the event that the performance of the Services has to be suspended on the grounds of *Force Majeure*, the time for completion shall be extended by the extent of the delay plus a reasonable period for the resumption of work or, if the speed of performing certain Services has to be reduced, the time for their completion shall be extended as may be necessary in the circumstances.

8.3.4 During the period of his inability to perform the Services as a result of an event of Force Majeure, the Service Provider shall be entitled to continue to be paid under the terms of the Contract and shall be reimbursed for additional costs reasonably and necessarily incurred by him in suspending, delaying and re-activating the performance of the Services.

8.3.5 *If the Force Majeure event continues for more than 90 (ninety) days, either Party shall have the right to terminate this Contract with immediate effect.*

8.4 Termination

8.4.1 The Employer may in addition to his rights under sub-clauses 6.4.2, 6.4.3 and 10.5 terminate the Contract by giving not less than thirty (30) days written notice thereof to the Service Provider after the occurrence of any of the following events:

(a) if the Service Provider does not remedy a failure in the performance of his obligations under the Contract within thirty (30) days after having been notified thereof, or within any further period as the Employer may have subsequently approved in writing;
(b) if the Service Provider becomes insolvent or bankrupt; or
(c) if, as the result of *Force Majeure*, the Service Provider is unable to perform a material portion of the Services for a period of not less than sixty (60) days;
(d) *commission of an offence in terms of clauses 6.1 and 6.4;*
(e) if the Service Provider acts in such a way, on this contract or any other contract with the Employer, that a statute relating to the combating of fraud, corruption, uncompetitive practice and the like can be invoked.
(f) if a director of the Service Provider is convicted by a court of fraud or corruption connected with this or another public contract, the Employer may terminate the Contract and exercise any other remedy available in law, subject to applicable due process.

Upon delivery of such notice by the Service Provider he shall immediately vacate the site and deliver to the Employer all drawings, documents and papers relating to the Services and shall within fourteen (14) days after the date of termination submit an account for the Services satisfactorily performed prior

to the date of notice. The Employer shall not be liable to the Service Provider for any loss of profit or damages suffered as a result of cancellation of the contract as contemplated in this clause.

8.4.2 The Service Provider may terminate the Contract, by giving not less than thirty (30) days written notice to the Employer after the occurrence of any of the following events:

(a) if the Employer fails to pay any monies due to the Service Provider in terms of the Contract and not subject to dispute pursuant to Clause 12 within forty-five (45) days after receiving written notice from the Service Provider that such payment is overdue; or
(b) if, as the result of *Force Majeure*, the Service Provider is unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
(c) when the Services have been suspended under Clause 8.5 and the period of suspension exceeds 6 months, or it is clear to the Service Provider that it will be impossible or impractical to resume the suspended Services before the period of suspension has exceeded 6 months; or
(d) if the Employer is in material breach of a term of the Contract and fails to rectify such breach within 30 days of the receipt of written notice requiring him to do so.

8.4.3 Upon termination of this Contract pursuant to Clauses 8.4.1 or 8.4.2, the Employer shall make the following payments to the Service Provider:

(a) remuneration in terms of the Contract for Services satisfactorily performed prior to the effective date of termination *less any costs arising from termination.*
(b) except in the case of termination pursuant to events (a) and (b) of Clause 8.4.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract.

8.4.4 Should the Service Provider, being an individual or the last surviving principal of a partnership or body corporate, die or be prevented by illness or any other circumstances beyond his control from performing the obligations implied by the Contract, the Contract shall be terminated without prejudice to the accrued rights or either Party against the other.

8.4.5 *Where required in terms of the contract data the surety delivered by the Service Provider in terms of this Contract shall remain in force until the completion of the project.*

8.5 Suspension

8.5.1 The Employer may temporarily suspend all or part of the Services by notice to the Service Provider who shall immediately make arrangements to stop the performance of the Services and minimise further expenditure.

8.5.2 When Services are suspended, the Service Provider shall be entitled to pro-rata payment for the Services carried out and reimbursement of all reasonable cost incident to the prompt and orderly suspension of the Contract.

8.6 Rights and liabilities of the Parties

Completion, suspension or termination of the Contract shall not prejudice or affect the accrued rights or liabilities of the Parties.

9. OWNERSHIP OF DOCUMENTS AND COPYRIGHT

9.1 Copyright of all documents prepared by the Service Provider in accordance with the relevant provisions of the copyright Act (Act 98 of 1978) relating to Project shall be vested in the party named in the Contract Data. Where copyright is vested in the Service Provider, the Employer shall be entitled to use the documents or copy them only for the purposes for which they are intended in regard to the Project and need not obtain the Service Provider's permission to copy for such use. Where copyright is vested in the Employer, the Service Provider shall not be liable in any way for the use of any of the information other than as originally intended for the Project and the Employer hereby indemnifies the Service Provider against any claim which may be made against him by any party arising from the use of such documentation for other purposes.

9.2 The ownership of data and factual information collected by the Service Provider and paid for by the Employer shall, after payment by the Employer, lie with the Employer. This shall include any research work, papers and presentations done using the Employer's resources and information.

9.3 The Employer shall have no right to use any documents prepared by the Service Provider whilst the payment of any fees and expenses due to the Service Provider in terms of the Contract is overdue.

10. SUCCESSION AND ASSIGNMENT

10.1 Except as defined in Clause 8.4.4 above, each Party binds itself and its partners, successors, executors, administrators, assigns and legal representatives to the other Party and to the other partners, successors, executors, administrators, assigns and legal representatives of the other Party in respect of all obligations and liabilities of the Contract.

10.2 An assignment including that of sub-contractor shall be valid only if it is a written agreement, by which the *Parties* transfer *their rights* and obligations under the Contract, or part thereof, to others.

10.3 The Service Provider shall not, without the prior written consent of the Employer, assign the Contract or any part thereof, or any benefit or interest there under, except in the following cases:
(a) by a charge in favour of the Service Provider's bankers of any monies due or to become due under the Contract; or
(b) by assignment to the Service Provider's insurers of the Service Provider's right to obtain relief against any other person liable in cases where the insurers have discharged the Service Provider's loss or liability.

10.4 The approval of an assignment by the Employer shall not relieve the Service Provider of his obligations for the part of the Contract already performed or the part not assigned.

10.5 If the Service Provider has assigned his Contract or part thereof without authorization, the Employer may forthwith terminate the Contract.

11. SUB-CONTRACTING

11.1 A sub-contract shall be valid only if it is a written agreement by which the Service Provider entrusts performance of a part of the Services to others.

11.2 The Service Provider shall not sub-contract to nor engage a Sub-contractor to perform any part of the Services without the prior written authorization of the Employer. The services to be sub-contracted and the identity of the Sub-contractor shall be notified to the Employer. The Employer shall, within 14 days of receipt of the notification and a full motivation why such services are to be sub-contracted, notify the Service Provider of his decision, stating reasons, should he withhold such authorization, failing which the Sub-contractor shall be deemed to be approved by the Employer. If the Service Provider enters into a sub-contract with a Sub-contractor without prior approval, the Employer may forthwith terminate the Contract.

11.3 The Employer shall have no contractual relationships with Sub-contractors. However, if a Sub-contractor is found by the Employer to be incompetent, the Employer may request the Service Provider either to provide a Sub-contractor with qualifications and experience acceptable to the Employer as a replacement, or to resume the performance of the relevant part of the Services himself.

11.4 The Service Provider shall advise the Employer without delay of the variation or termination of any sub-contract for performance of all or part of the Services.

11.5 The Service Provider shall be responsible for the acts, defaults and negligence of Sub-contractors and their agents or employees in the performance of the Services, as if they were the acts, defaults or negligence of the Service Provider, his agents or employees. Approval by the Employer of the sub-contracting of any part of the Contract or of the engagement by the Service Provider of Sub-contractors to perform any part of the Services shall not relieve the Service Provider of any of his obligations under the Contract.

11.6 The Service Provider undertakes to pay the sub-contractor the full value as certified as being due in each interim monthly account. The Service Provider further undertakes to make payment within 7 (seven) days after payment by the Employer or by the 25th of the month following that in which the sub-contractor invoiced for the work, whichever date is earlier

11.7 The Employer may request the Service Provider to supply reasonable evidence that the subcontractor has received all amounts due in accordance with previous accounts, less deductions or otherwise. Unless the Service Provider:

(i) submits this reasonable evidence to the Employer, or

(ii) satisfies the Employer in writing that the Service Provider is reasonably entitled to withheld or refuse to pay these amounts, and

(iii) submits to the Employer reasonable evidence that the subcontractor has been notified of the Service Provider's entitlement,

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

11.8 It is a condition of this contract that the Service Provider sub-contracts a minimum of 30% to Targeted Enterprise/s.

- *Minimum sub-contract requirement for all entities is 30%.*

The introduction of a Contractor Participation Goal (CPG) requirement of a minimum 30% during the contract period shall be implemented not later than nine (9) months after the Contract Commencement Date. Such requirement shall be subject to the amendment and approval of SANRAL's Preferential Procurement Policy, completion of the requisite public consultation processes, and all applicable SANRAL internal governance approvals. The CPG requirement shall only become applicable following formal written notification by SANRAL to the Consultant confirming its implementation and the applicable requirements

12. RESOLUTION OF DISPUTES

12.1 Settlement

12.1.1 Any dispute between the Parties shall arise by either party presenting to the other in writing the nature of the dispute and the facts to be dealt with. The Parties shall negotiate in good faith with a view to settling any dispute or claim arising out of or relating to the Contract and may not initiate any further proceedings until either Party has, by written notice to the other, declared that such negotiations have failed.

12.1.2 Any dispute or claim arising out of or relating to the Contract which cannot be settled between the Parties shall in the first instance be referred by the Parties to either mediation or adjudication as provided for in the Contract Data.

12.2 Mediation

12.2.1 If the Contract Data does not provide for dispute resolution by adjudication, not earlier than ten working days after having advised the other Party, in terms of Clause 12.1, that negotiations in regard to a dispute have failed, an aggrieved Party may require that the dispute be referred, without legal representation, to mediation by a single mediator. The mediator shall be selected by agreement between the Parties, or, failing such agreement, by the person named for this purpose in the Contract Data. The costs of the mediation shall be borne equally by the Parties.

12.2.2 The mediator shall convene a hearing of the Parties and may hold separate discussions with any Party and shall assist the Parties in reaching a mutually acceptable settlement of their differences through means of reconciliation, interpretation, clarification, suggestion and advice. The Parties shall record such agreement in writing and thereafter they shall be bound by such agreement.

12.2.3 The mediator is authorised to end the mediation process whenever in his opinion further efforts at mediation would not contribute to a resolution of the dispute between the Parties and shall do so, if after a period of ninety days from entering into the mediation process, no resolution has been achieved.

12.2.4 If either Party is dissatisfied with the opinion expressed by the mediator or should the mediation fail, then such Party may require that the dispute be referred to arbitration or litigation in a competent civil court, as provided for in the Contract *Data; provided that the dissatisfied Party notifies the other in writing* within *28 days* of mediator's decision being issued or the mediator declaring the mediation to have ended, as provided for in the Contract Data. Claims not brought within the time periods set out herein will be deemed to be waived.

12.3 Adjudication

12.3.1 If the Contract Data does not provide for dispute resolution by mediation, an aggrieved Party may refer the dispute to adjudication. Adjudication shall be in accordance with the latest edition of the separately published CIDB Adjudication Procedures.

12.3.2 The adjudicator shall be appointed in terms of the Adjudicator's Agreement bound in the Construction Industry Development Board's Adjudication Procedure.

12.3.3 The Adjudicator shall be any person agreed to by the parties or, failing such agreement, shall be nominated by the person named in the Contract Data. The Adjudicator shall be appointed in accordance with the Adjudicator's Agreement contained in the CIDB Adjudication Procedure.

12.3.4 If a Party is dissatisfied with the decision of the Adjudicator, the Party may give the other Party *written* notice of dissatisfaction within 28 days of the receipt of that decision and refer the dispute to arbitration or litigation in a competent civil court as provided for in the Contract Data. If notice of dissatisfaction is *not* given within the specified time, the decision shall be final and binding on the Parties.

12.4 Arbitration

12.4.1 Arbitration, where provided for in the Contract Data, shall be by a single arbitrator in accordance with the provisions of the Arbitration Act of 1965 as amended and shall be conducted in accordance with such procedure as may be agreed between the Parties or, failing such agreement, in accordance with the Rules for the Conduct of Arbitrations, current at the date of the contract, published by the Association or Arbitrators.

12.4.2 The arbitrator shall be mutually agreed upon or, failing agreement, to be nominated by the person named in the Contract Data.

13. LIABILITY

13.1 Liability of the Service Provider

13.1.1 The Service Provider shall be liable to the Employer arising out of or in connection with the Contract if a breach of Clause 5.1 is established against him.

13.1.2 The Service Provider shall correct a Defect on becoming aware of it. If the Service Provider does not correct a Defect within a reasonable time and the Defect arose from a failure of the Service Provider to comply with his obligation to provide the Services, the Service Provider shall pay to the Employer the amount which the latter assesses as being the cost of having such Defect corrected by Others.

13.2 Liability of the Employer

13.2.1 The Employer shall be liable to the Service Provider arising out of or in connection with the Contract if a breach of an obligation of his in terms of the Contract is established. The Service Provider shall have no separate delictual right of action against the Employer.

13.2.2 In the event where the design is found to be incomplete or inconclusive and results in delay damages *and/or additional expenditure during the works contract period, the Employer shall be entitled to claim against the Services Provider's Professional Indemnity.*

13.3 Compensation

If it is established that either Party is liable to the other, compensation shall be payable only on the following terms:

(a) Compensation shall be limited to the amount of reasonably foreseeable loss and damage suffered as a result of the breach.

(b) The compensation payable by either Party shall be reduced by the arbitrator/mediator/adjudicator to such extent as is deemed just and equitable having regard to the degree in which the other Party or any third party was at fault in relation to the loss or damage. The liability of the Parties

is not joint and each Party shall only be liable for that proportion of the compensation which is attributable to his fault.

(c) In any event, the amount of compensation will be limited to the amount specified in Clause 13.5.

13.4 Duration of Liability

Notwithstanding the terms of the Prescription Act No. 68 of 1969 (as amended) or any other applicable statute of limitation neither the Employer nor the Service Provider shall be held liable for any loss or damage resulting from any occurrence unless a claim is formally made within the period stated in the Contract Data or, where no such period is stated, within a period of three years from the date of termination or completion of the Contract.

13.5 Limit of Compensation

13.5.1 The maximum amount of compensation payable by either Party to the other in respect of liability under the Contract is limited to:

a) the sum insured in terms of 5.4. in respect of insurable event; or

b) the sum stated in the Contract Data or, where no such amount is stated, to an amount *equal to twice the Contract Price (inclusive of VAT) payable to the Service Provider under the Contract.*

13.5.2 Each Party agrees to waive all claims against the other insofar as the aggregate of compensation which might otherwise be payable exceeds the aforesaid maximum amount payable.

13.5.3 If either Party makes a claim for compensation against the other Party and this is not established, the claimant shall reimburse the other for his reasonable costs incurred as a result of the claim or if proceedings are initiated in terms of Clause 12 for such costs as may be awarded.

13.6 Indemnity by the Employer

The Employer shall indemnify the Service Provider against all claims by third parties which arise out of or in connection with the performance of the Services save to the extent that such claims do not in the aggregate exceed the limit of compensation in Clause 13.5 or are covered by the insurances arranged under the terms of Clause 5.4.

13.7 Exceptions

13.7.1 Clauses 13.5 and 13.6 shall not apply to claims arising from deliberate misconduct.

13.7.2 The Service Provider shall have no liability whatsoever for actions, claims, losses or damages occasioned by:

a) the Employer omitting to act on any recommendation, or overriding any act, decision or recommendation, of the Service Provider, or requiring the Service Provider to implement a decision or recommendation with which the Service Provider disagrees or on which he expresses a serious reservation; or

b) the improper execution of the Service Provider's instructions by agents, employees or independent contractors of the Employer.

14. REMUNERATION AND REIMBURSEMENT OF SERVICE PROVIDER

The Employer shall remunerate and reimburse the Service Provider for the performance of the Services as set out in the Pricing Data *and Scope of Works*. If not otherwise stated in the Pricing Data, the following shall apply:

14.1 The Service Provider shall be entitled to render interim monthly accounts for fees and reimbursements throughout the duration of the Contract. Interim amounts of lump sum fees due *(or any specified fixed-progressed payments due that have been delayed by the acts of the Employer)* shall be based on progress.

14.2 Amounts due to the Service Provider shall be paid by the Employer within thirty (30) days of receipt by him of the relevant invoices. If the Service Provider does not receive payment by the due date, he shall be entitled to charge interest on the unpaid amount, which is payable by the Employer, at the overdraft rate charged him by his bank plus 2% per annum, compounded monthly and calculated from the due date of payment.

14.3 If any item or part of an item in an invoice submitted by the Service Provider is disputed by the Employer, the latter shall, before the due date of payment, give notice thereof with reasons to the Service Provider, but shall not delay payment of the balance of the invoice. Clause 14.2 shall apply to disputed amounts which are finally determined to be payable to the Service Provider.

14.4 In respect of Services charged on a time basis and all reimbursable expenses, the Service Provider shall maintain complete supporting records for at least five (5) years after completion or termination of the Contract, or for any longer period required by law, an audit, litigation or the Employer's record-retention policy. During that period the Employer may, on not less than fourteen (14) days' notice, require an audit of claims by a reputable independent firm nominated by the Employer, subject to reasonable access arrangements.

14.5 *All accounts presented for payment shall be according to the Employers prescribed format with proof of ITIS data capture and shall be submitted to the Employer electronically and when required, delivered in hard copy to the Employer's relevant regional office.*

14.6 Payments due shall be subject to the deduction of retention monies as stated in the Contract Data. The retention monies so deducted shall be released in accordance with the phases and conditions stated in the Contract Data.

14.7 The Employer shall be entitled to make direct payment to a subcontractor as stated in Clause 11.7 and deduct the amount from the Service Provider's interim account.

14.8 The Service Provider unconditionally authorises SANRAL to set off any debt agreed to which is due and payable by the Service Provider on this or any other SANRAL contract.

14.9 If applicable, Consumer Price Index will be paid according to the method stated in the Contract Data.

C1.2.2 CONTRACT DATA - INFORMATION PROVIDED BY THE EMPLOYER

Clause No **Contract Data**

The Employer is the South African National Roads Agency SOC Limited (SANRAL).

The Employer's domicilium citandi et executandi (permanent physical business address) is:

48 Tambotie Avenue
VAL DE GRACE, 0184

The authorised and designated representative of the Employer is:

The Provincial Head (Northern Region)
Tel: No.: (012) 426 6200
Fax No.: (.....) –TBA.....

3.4 The address for receipt of communications is:

Name: Project Manager
Tel: No.: (.....) –TBA.....
Fax No.: (.....) –.TBA.....
E-mail: TBA.....

Address:
The South African National Roads Agency SOC Ltd
48 Tambotie Avenue
VAL DE GRACE,
0184

3.5 The project is Consulting Engineering Services for the Routine Road Maintenance of National Route R42 Section 8 From Gauteng/Mpumalanga Border to Delmas, N12 from Victor Khanye/Emalahleni Municipal Border to the Gauteng/Mpumalanga Border , R555 Section 1x from Gauteng/Mpumalanga Border to Victor Khanye/Emalahleni Municipal Border.

The location for performance of the Project is in Victor Khanye Local Municipality within Nkangala District Municipality in Mpumalanga Province. The Contract Footprint includes the roads, road sections, SANRAL properties and related assets listed in the Scope of Work, together with any Transferred Road added during the Contract by a written instruction or variation from the Employer.

3.6 The Service Provider may only release public or media statements or publish material related to the Services or Project subject to the approval of the Employer.

3.11.1 The penalty payable for poor performance will be applied over the full-time duration of the Contract. Penalty charges shall be as follows:

a) Failure to meet milestone dates in the Project programme = R2 000.00/day (excl. VAT) subject to a maximum of 10% of the Contract Value.
b) Failure to capture structures inventory and condition updates onto ITIS before issue of Taking-Over-Certificate (TOC) = R5000.00/structure (bridges and major culverts) per week or part thereof subject to a maximum of R50 000.00 (excl. VAT) per structure.
c) Failure to disclose Sub-contractors, value of subcontract = up to 10% of the Contract value.
d) Late capture of monthly ITIS PIM date = R2,000.00/day (excl. VAT) applicable from the first day of the new month following the previous month end, subject to a maximum of 10% of the Contract Value.
e) Unresolved errors in monthly ITIS PIM data captured without evidence of logging issues = R2,000.00/day (excl. VAT) applicable from the first day of the new month

following the previous month end, subject to a maximum of 10% of the Contract Value.

f) Late processing and submission of Contractor's Payment Certificate = R2,000.00/day (excl. VAT) applicable from the first day of the new month following the previous month end, subject to a maximum of 10% of the Contract Value.

g) Any audit finding raised against a contract by Internal Audit, AGSA, DOL/DFE related to duties of the Service Provider = R20,000.00/finding (excl. VAT), subject to a maximum of 10% of the Contract Value.

h) Late issuing of Job Instructions for contractor using ITIS Desktop/Mobile App for:
   (i) Pothole reports on Vala Zonke App by public for which a Job Instruction has not been issued to Contractor =R2000.00/day (excl. VAT);
   (ii) Drains/culverts/bridges that are silted up or where flood debris is blocking waterways within road reserve as identified from Inspections =R2000.00 / instance (excl. VAT);
   (iii) Grass cutting causing unsafe conditions = R2,000.00/day (excl. VAT) for each calendar day that Job Instruction is issued late, subject to a maximum of 10% of the Contract Value
   (iv) Missing/damaged regulatory and warning signs causing unsafe conditions =R2000.00 / instance (excl. VAT).

i) CE not performing physical monthly route verification inspection of quality of work done using the ITIS / Mobile App on a monthly basis = the monthly sum to fulfill the duties of the Engineer as per Payment Item 35.01(a)(i).

j) Late submission of any other deliverable as required by the contract but not specifically stated = R2,000.00/day (excl. VAT) applicable from the first day after the deliverable became due, subject to a maximum of 10% of the Contract Value.

3.14 The programme shall be submitted within 14 days of the award of the Contract.

5.1.7

It is encouraged that Local Targeted Enterprises from the Mpumalanga Province participate in a minimum of 1/3 (one-third) of the specified percentage of the Contract Price (excluding provisional and prime cost sums and the respective mark-up, but including provision for site supervision staff and the respective mark-up).

5.4 The Service Provider is required to perform the Services with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards.

The Service Provider is required to provide the following insurances:

1. Insurance against Professional Indemnity

Cover is:
R20 million without a limit on the number of claims. The limit of liability is only provided to cover the Employer's damages and does not allow for the Service Provider's cost for defending any claim
Period of cover: Structures – 25 years all other instances – 10 years

2. Insurance against General Public Liability

Cover is:
R10.0 million
Period of cover: Structures – 25 years all other instances – 10 years

3. Third Party Liability

Cover is:
R20 million

Period of cover: Duration of contract only.

5.5 The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions:

1. Appointing Key Persons not listed by name in the Contract Data.
2. Appointing Sub-contractors for the performance of any part of the Service.
3. Expending any Provisional Sum in the Contract or Works Contract.
4. Authorising any work under a Works Authorisation for the Works Contract.
5. Over-expenditure on the Works Contract.
6. Changing the scope of work for the Works Contract.
7. Acceptance of sub-standard work under the Works Contract.
8 All aspects requiring the Employers approval in terms of SANRAL's Works Manual.
9. Making statements to the media regarding the project.

5.9

The Performance Guarantee must be provided within 14 days of written acceptance by the Employer of the tender offer. The amount of the Performance Guarantee is 5% of the accepted tender sum for the design portion of the contract (including VAT).

7.2 The **Key Person** required for this project is:

- Contract Engineer (Who shall be the permanent staff member of the tenderer)

7.3 The working hours and holiday for site staff are:

- Site working hours 08:00 to 17:00 (24hrs per day and 7days per week on standby)
- Annual leave shall be taken during the recognized construction industry shutdown period.

8.1 The effective date of the contract shall be the date of the Form of Acceptance.

The time to commence the performance of the Services is no later than 28 (twenty-eight) calendar days after the date that the Contract becomes effective, however the commencement of the supervision phase will be confirmed at the Hand-Over meeting.

8.2 The Contract is concluded on the date when the Service Provider has completed all deliverables in accordance with the Scope of Work.

9.1 Copyright of documents prepared for the Project shall be vested with the Employer.

11.2 Any subcontracting, participation, specific-goal or Targeted Enterprise requirement shall be the tender-specific requirement stated in the Tender Data, Returnable Schedules, Scope of Work and accepted offer. It shall be supported by the approved procurement process. The Service Provider shall not sub-contract more than 25% of the tendered contract value excluding any services specified in the Scope of Works to be procured under a Provisional Sum through the Employer's Supply Chain Procurement process) to any other enterprise that does not have an equal or higher B-BBEE status level, unless the intended sub-contractor(s) is an Exempted Micro Enterprise that has the capability and ability to execute the sub-contract.

The Targeted Enterprise shall not be allowed to sub-contract any work that forms part of the tendered participation percentage without the Employer's approval. Targeted Enterprise(s) shall be registered on the National Treasury's Central Supplier Database (CSD).

All sub-contractor(s) shall be registered on the National Treasury's Central Supplier Database (CSD).

The Service Provider shall disclose all sub-contracting arrangements. If the Service Provider fails to disclose, he shall be given 14 (fourteen) days to make representation as to why:

(i) The contract shall not be terminated.

(ii) The Service Provider shall not be penalised up to 10% of the value of the contract.

12. Interim settlement of disputes is to be by mediation.

Final settlement is by litigation.

In the event that the parties fail to agree on a mediator, the mediator is to be nominated by the President of the South African Institution of Civil Engineering.

13.4 Neither the Employer nor the Service Provider is liable for any loss or damage resulting from any occurrence unless a claim is formally made within 36 months from the date of termination or completion of the Contract.

13.5 The maximum amount of compensation payable by either Party to the other in respect of liability under each Contract is limited to R20 million.

14.6 Retention monies shall be 10% of the value of completed Services up to a maximum of R150 000.00 (excluding VAT). The retention shall be released by the Employer after receipt and approval of the Contract Report, as-built material records and as-built drawings, and no later than one (1) month after issue of the Performance Certificate, subject to any outstanding contractual obligations.

14.7 Consumer Price Index: refer to pricing instructions in clause C2.1.6 of the pricing schedule.

Base date shall be the date 28 days **prior** to the latest date for submission of tenders.

C1.2.3 CONTRACT DATA – INFORMATION PROVIDED BY THE TENDERER

A: CONTACT DETAIL

The Service Provider is .....

Address: .....

Telephone: .....

Facsimile: .....

The authorised and designated representative of the Service Provider is:

Name: .....

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

.....

Telephone: .....

Facsimile: .....

Address:.....

E-mail Address: .....

B: KEY PERSON

Key Person	**Name**	**Indicate whether permanent or not permanent ***
Contract Engineer		
Alternate to Contract Engineer (if applicable)		

* Attach letter confirming permanent employment, together with the requirements of the B-Forms. For clarity, this shall mean copies of salary slips and proof of payment, Pay-As-You-Earn (PAYE); Unemployment Insurance Fund (UIF) and Skills Development Levy payments made by the tenderer on behalf of its employee (Key Person) for the last (3) three months prior to tender closing.

C. SUB-CONTRACTING TO TARGETED ENTERPRISES (Refer to Form B7)

The amount of work expressed as a percentage of the Contract Price (excluding provisional and prime cost sums and the respective tendered mark-up (if any), but including provision made for site supervision staff (payment items 35,03(a) and (b)) that will be undertaken by a Targeted Enterprise(s) selected by the Service Provider shall be ……%*.

*** Note to tenderer: insert percentage as tendered in Form B7.**

D: INFORMATION REQUIRED FOR THE PUBLICATION OF AWARD AS PER NATIONAL TREASURY INSTRUCTION NOTE

Name of Partners, Members or Directors	Appointment Date	Designation	Professional Registration Number

C1.3 OTHER STANDARD FORMS

C1.3.1 FORM OF GUARANTEE

Note to tenderer:
This pro-forma guarantee is included for information purposes only. Where required in terms of the Contract, a separate form of Guarantee will be issued to the successful tenderer for completion and signature

TO: The South African National Roads Agency SOC Limited
PO Box 415
Pretoria
0001

CONTRACT SANRAL X.008-004-2026/1F

CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF THE NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER , R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

1. I/We, the undersigned,

   ……..and……..

   in our capacity 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……) (the “guaranteed amount”) for the due fulfilment by (*insert the name of Service Provider)* (hereinafter referred to as “the Service Provider”) of its obligations to The South African National Roads Agency SOC Limited (hereinafter referred to as “SANRAL”) in terms of the above stated contract between the Service Provider and SANRAL.

2. We hereby renounce 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. We undertake and agree to pay to SANRAL the said guaranteed amount or such portion as may be demanded on receipt of a written demand from SANRAL, which demand may be made by SANRAL, if in your opinion and at your sole discretion, the said Service Provider 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 condition of contract, or if he fails or neglects to refund to SANRAL any amount found to be due and payable to SANRAL, 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 guaranteed amount or such portion as may be demanded may be retained by SANRAL on condition that after completion of the service as stipulated in the contract, SANRAL 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 us at the time when SANRAL accounts to the Guarantor in terms of clause 5 above, or
   (b) shall lapse upon the issue of the Taking-Over Certificate for the construction Works of the project, 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 ……..……..

NAME (IN CAPITALS) ……..……..

AS WITNESSES: 1…….…. 2 ……..……

NAMES (IN CAPITALS) 1 ..…..…… 2 …….

ADDRESSES: 1…..…… 2 ……..……

C1.3.2 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993 (ACT NO 85 OF 1993) AND CONSTRUCTION REGULATIONS 2014

This AGREEMENT made at .....

on this the ..... day of ..... in the year .....

between THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED (hereinafter called "the Employer") on the one part, herein represented by ..... *compiler to insert*

in his capacity as ..... *compiler to insert*

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 designed, viz CONTRACT SANRAL: X.008-004-2026/1F Consulting Engineering Services for the Routine Road Maintenance of the National Route R42 Section 8 from Gauteng/Mpumalanga Border to Delmas, N12 from Victor Khanye/Emalahleni Municipal Border to the Gauteng/Mpumalanga Border, R555 Section 1x from Gauteng/Mpumalanga Border to Victor Khanye/Emalahleni Municipal Border.

and has accepted a tender by the Mandatary for the design and construction supervision of such works and has appointed the Mandatary in terms of Regulation 5(5) of the Construction Regulations 2014, 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 construction contract Performance Certificate issued in terms of sub-clause 11.9 of the Conditions of Contract for Construction for Building and Engineering Works designed by the Employer (1999) published by Federation Internationale des Ingenieurs-Conseils (FIDIC), as contained in Volume 1 of the contract documents pertaining to this contract, or
   b) the date of termination of this contract in terms of Clause 8 of the CIDB's Standard Conditions of Contract for Professional Services.

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 sub-service providers.

4. In addition to the Contract requirements, the Mandatary shall perform the Client's-agent duties stated in regulations 5(6) and 5(7) of the Construction Regulations, 2014, and the designer duties in regulation 6 where applicable.

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

6. The Mandatary warrants that it and its sub-service providers are registered and in good standing under the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993), as amended, for as long as their employees perform work under the Contract. A valid letter of good standing from the Compensation Fund shall be provided to the Employer on signature and on renewal.

7. The Mandatary undertakes to ensure that he and/or his sub-service providers 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 Section 24 of 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 sub-service providers.

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 1: .....

NAME (IN CAPITALS) .....

WITNESS 2: .....

NAME (IN CAPITALS) .....

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

WITNESS 1: .....

NAME (IN CAPITALS): .....

WITNESS 2: .....

NAME (IN CAPITALS) .....



THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

CONTRACT SANRAL X.008-004-2026/1F

FOR

CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER , R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

BASE DATE: OCTOBER 2026
VOLUME 1

TENDER DOCUMENT
BOOK 3 of 3

CHIEF EXECUTIVE OFFICER
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED
48 TAMBOTIE AVENUE
VAL DE GRACE
PRETORIA, 0184

NAME OF TENDERER: .....

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

CONTRACT SANRAL X.008-004-2026/1F

CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF THE NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER , R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER.

THIS DOCUMENT COMPILED BY:

The Provincial Head (Northern Region)
The South African National Roads Agency SOC Ltd
48 Tambotie Avenue
Val De Grace,
0184

TABLE OF CONTENTS **PAGE**

BOOK 3 OF 3

PART C2: PRICING DATA..... C2-1
PART C3: SCOPE OF WORK C3-1
PART C4: SITE INFORMATION C3-52
PART C5: ANNEXURE C3-132

PART C2: PRICING DATA

PART C2: PRICING DATA

TABLE OF CONTENTS **PAGE**

C2.1 PRICING INSTRUCTIONS C2-3
C2.2 PRICING SCHEDULE (INCORPORATING SBD3) C2-5
C2.3 SUMMARY OF PRICING SCHEDULE..... C2-6
FORM C2.4: KEY PERSONS FOR THIS PROJECT AND SUMMARY OF NORMALISED HOURS TENDERED C2-7

C2.1 PRICING INSTRUCTIONS

C2.1.1 For the purposes of this Pricing Schedule, the following words shall have the meanings hereby assigned to them.

Unit: The unit of measurement for each item of work as defined in the Scope of Works.

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

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

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

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

Provisional Sum: An amount allowed for in the Pricing Schedule, for which the quantity of work is not known.

Prime cost: Is a specific type of Provisional Sum where payment is made on the production of invoices showing the cost price of the implementation or installation of the service required. Services rendered in this manner carry a cost for which a rate or a lump sum is offered at tender stage to cover all the tenderer's handling, supervision and liability costs in providing the item or services.

C2.1.2 The quantities set out in the Pricing Schedule are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the Pricing Schedule, will be used to determine payments to the Service Provider.

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

C2.1.3 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 Scope of Works and Contract 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 Pricing Schedule are only approximate.

C2.1.4 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 pricing schedule.

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 of this preamble.

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

C2.1.5 The short descriptions of the payment items in the Pricing Schedule 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 and Scope of Works for more detailed information regarding the extent of work entailed under each item.

C2.1.6 Where so indicated under measurement and payment, prices or rates will be subject to adjustment for escalation as provided for below:

- The prices or rates shall be fixed for the first 12-month period determined from the tender base date and no change during this period will be allowed for escalation.
- On the 12-month anniversary date of the Contract base date the rates or sums shall be adjusted by the 12-month year on year CPI index (as published in the monthly bulletin PO141 of Statistics

South Africa under table B) and fixed at this value for the following 12-month period. Subsequent 12-month periods shall be dealt with on the same basis.

- Adjustment of lump sum prices for escalation shall only be applicable to that portion of the relevant Service which is incomplete at the end of the 12-month anniversary date and shall not be applicable to any progress payments already claimed.

Adjustment for escalation shall only be applicable for services, or portions thereof, that are still within the prescribed programme and any approved extensions of time.

C2.1.7 Interim payments for lump sum payment items may be permitted. Such interim payments shall however be limited to proven progress achieved for that particular service deliverable. The sum of any progress payments made under a particular lump sum payment item shall be deducted prior to calculating any adjustments for escalation as described in clause C2.1.6 above.

C2.1.8 Provisional and Prime Cost Sums: Each 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 Service Provider shall include only such amounts, for the work, supplies or services to which the Sum relates, as the Employer shall have instructed.

For each Sum, the Employer may instruct plant, materials or services to be procured by the Service Provider 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 Service Provider under the Sum, and
- An item for compilation and printing of procurement documentation, quotation/tender process and evaluation, and all overhead charges and profit, tendered in the Pricing Schedule. Provided that for Prime Cost Sums only, where a percentage mark-up or lump sum mark-up is tendered, which shall exclude profit.

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

Any percentage adjustment or lump sum mark-up against the Sum for handling fee, profits, etc. shall not be negative.

C2.1.9. Subject to the conditions stated in Clause C2.1.10 below, the rates and lump sums filled in by the tenderer in the pricing schedule 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 totalled pricing schedule, the rates and the lump sums 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 pricing schedule. 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 and lump sums, the extensions and the tender sum.

C2.1.10 A tender may be deemed non-responsive if the unit rates or lump sums for some of the items in the Pricing Schedule 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 Pricing Schedule shall be in South African Rand and whole cents

C2.1.12 The item numbers appearing in the Pricing Schedule refer to the corresponding item numbers in the Scope of Work.

C2.2 PRICING SCHEDULE (Incorporating SBD3)

Note to tenderer:

The tenderer will be declared non-responsive if:

- **A signed Form of Offer is submitted with an incomplete Pricing Schedule.**
- **A signed Form of Offer is submitted without a Pricing Schedule, but only the Summary of Pricing Schedule submitted.**

REFER TO THE APPROVED EXCEL PRICING SCHEDULE ISSUED WITH THE TENDER.

C2.3 SUMMARY OF PRICING SCHEDULE

3200	Detailed assessment phase	R.....
3300	Tender Documentation	R.....
3400	Site inspection and tender period	R.....
3500	Administration and monitoring of the Works Contract	R.....
3600	Additional duties	R.....
3700	Off-site materials testing	R.....
3800	Close – Out	R……
SUB-TOTAL		R.....
VAT (15%)		R.....

TENDER SUM CARRIED FORWARD TO FORM OF OFFER (C1.1.1) R.....

REFER TO THE APPROVED EXCEL PRICING SCHEDULE ISSUED WITH THE TENDER.

SIGNED BY TENDERER: …….……

FORM C2.4: KEY PERSONS FOR THIS PROJECT AND SUMMARY OF NORMALISED HOURS TENDERED

REFER TO THE APPROVED EXCEL PRICING SCHEDULE ISSUED WITH THE TENDER.

SIGNED BY TENDERER: ……..

PART C3: SCOPE OF WORK

PART C3: SCOPE OF WORK

TABLE OF CONTENTS **PAGE**

C3.1 GENERAL REQUIREMENTS C3-2
C3.2 DETAILED ASSESSMENT PHASE: ROAD CONDITION REPORT C3-19
C3.3 TENDER DOCUMENTATION C3-24
C3.4 CLARIFICATION MEETING, TENDER PERIOD AND TENDER EVALUATION C3-26
C3.5 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT C3-29
C3.6 ADDITIONAL DUTIES C3-44
C3.7 OFF-SITE MATERIALS TESTING C3-48
C3.8 CLOSE OUT C3-49

C3 SCOPE OF WORKS

C3.1 GENERAL REQUIREMENTS

C3.1.1 Scope

This section covers matters that relate to the Contract as a whole. Definitions, phrases or wording that would otherwise require repetition in other sections of this document are also covered in this section. Matters covered by the General and/or Particular Conditions of Contract are not repeated in this section, except to provide more detailed information.

C3.1.2 Location of the project

The proposed project is located on National Route R42 Section 8 from Gauteng/Mpumalanga Border to Delmas, N12 from Victor Khanye/Emalahleni Municipal Border to the Gauteng/Mpumalanga Border, R555 Section 1x from Gauteng/Mpumalanga Border to Victor Khanye/Emalahleni Municipal Border.. in the Nkangala District Municipality in the Mpumalanga Province.

A locality plan including details of the construction history and existing pavement structure along this portion of the route(s) are available in SARDS (South African Road Design System) online. A user manual is included in Appendix H in Part C4 of this document.

C3.1.3 Description of the project: Routine Road Maintenance Contract

The Service Provider shall be required to provide Consulting Engineering services relating to the letting, management and supervision of the Routine Road Maintenance on National Route R42 Section 8 from Gauteng/Mpumalanga Border to Delmas, N12 from Victor Khanye/Emalahleni Municipal Border to the Gauteng/Mpumalanga Border, R555 Section 1x from Gauteng/Mpumalanga Border to Victor Khanye/Emalahleni Municipal Border.The construction monitoring service shall be for the duration of the Works contract which has a contract period of up to 3.5 (three and a half) years. The site comprises of the following routes with a total length of approximately 95.32 kilometres:

ROUTE	SECTION	FROM km	TO km	LENGTH kms
N12	19	41	54,48	13,48
N12	20	0	23	23
R555	1EX	0	40,4	40,4
R42	8	0	18,44	18,44
			Total Centreline Length	**95,32**

Additional SANRAL properties forming part of the site:

Project No	RDS No	Location Description	Status	Road ID	Start Km	End Km	Property Area (m2)
X.002-105-2019/1	RDS12684	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	15381
X.002-105-2019/1	RDS12680	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	27235
X.002-105-2019/1	RDS12679	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	34020
X.002-105-2019/1	RDS12682	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	23489
X.002-105-2019/1	RDS47267	Rietkol No 237 - IR	Title (SANRAL)	N01219E	41	54,495	5061
X.002-105-2019/1	RDS12686	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	27205
X.002-105-2019/1	RDS12681	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	33816
X.002-105-2019/1	RDS12248	Geluk No 234 - IR	Title (SANRAL)	N01219E	41	54,495	47281
X.002-105-2019/1	RDS12683	Modder East Orchards - IR	Title (SANRAL)	N01219W	41	54,479	18373
X.002-105-2019/1	RDS12746	Rietkol No 237 - IR	Designated	N01219W	41	54,479	15184
X.002-105-2019/1	RDS47268	Rietkol No 237 - IR	Title (SANRAL)	N01219W	41	54,479	29733
X.002-105-2019/1	RDS12703	Modder East Orchards - IR	Title (SANRAL)	N01219W	41	54,479	13094
X.002-105-2019/1	RDS12747	Rietkol No 237 - IR	Designated	N01219W	41	54,479	5340
X.002-105-2019/1	RDS19298	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	1150
X.002-105-2019/1	RDS12673	Leeuwpoort No 205 - IR	Title (SANRAL)	N01220E	0	68,878	248992
X.002-105-2019/1	RDS08734	Zeekoewater No 311 - JS	Title (SANRAL)	N01220E	0	68,878	4454
X.002-105-2019/1	RDS08720	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	43420
X.002-105-2019/1	RDS08763	Joubertsrust No 310 - JS	Title (SANRAL)	N01220E	0	68,878	9052
X.002-105-2019/1	RDS08765	Joubertsrust No 310 - JS	Title (SANRAL)	N01220E	0	68,878	2620
X.002-105-2019/1	RDS08750	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	17911
X.002-105-2019/1	RDS08736	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	9391

X.002-105-2019/1	RDS08743	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	39343
X.002-105-2019/1	RDS08717	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	60112
X.002-105-2019/1	RDS08724	Zeekoewater No 311 - JS	Title (SANRAL)	N01220E	0	68,878	18519
X.002-105-2019/1	RDS12623	Grootpan No 7 - IS	Title (SANRAL)	N01220E	0	68,878	42476
X.002-105-2019/1	RDS08745	Klipfontein No 322 - JS	Title (SANRAL)	N01220E	0	68,878	16329
X.002-105-2019/1	RDS12247	Van Dyks Put No 214 - IR	Title (SANRAL)	N01220E	0	68,878	196443
X.002-105-2019/1	RDS08733	Witbank Ext 6 (Industrial) - JS	Title (SANRAL)	N01220E	0	68,878	203
X.002-105-2019/1	RDS59483	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	3555
X.002-105-2019/1	RDS08706	Zeekoewater No 311 - JS	Title (SANRAL)	N01220E	0	68,878	272
X.002-105-2019/1	RDS59482	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	12174
X.002-105-2019/1	RDS08718	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	28244
X.002-105-2019/1	RDS59481	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	47208
X.002-105-2019/1	RDS08719	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	2088
X.002-105-2019/1	RDS12249	Oogiesfontein No 4 - IS	Title (SANRAL)	N01220E	0	68,878	27229
X.002-105-2019/1	RDS12649	Klipfontein No 568 - JR	Title (SANRAL)	N01220E	0	68,878	35
X.002-105-2019/1	RDS12564	Dixon Agricultural Holdings - JS	Title (SANRAL)	N01220W	0	68,835	1789
X.002-105-2019/1	RDS83170	Klipfontein No 568 - JR	Title (SANRAL)	N01220W	0	68,835	148688
X.002-105-2019/1	RDS19662	Waterpan No 8 - IS	Title (SANRAL)	N01220W	0	68,835	1
X.002-105-2019/1	RDS12562	Boschpoort No 211 - IR	Title (SANRAL)	N01220W	0	68,835	316909

The Services required of the Service Provider are divided into the following distinct phases:

- Detailed Assessment Phase for the compilation of a Road Condition Report.
- Tender documentation for the Works.
- Site inspection and tender evaluation.
- Administration and monitoring of the Works.
- Off-site material testing.
- Close out

C3.1.3.1 Future provincial road transfers and changes to the Contract Footprint

The Contract Footprint comprises the roads and assets described in this Scope of Work and may, during the Contract, be expanded to include provincial or other public roads within or connected to the geographical footprint that are declared national roads or formally transferred to SANRAL in terms of applicable law.

An anticipated transfer does not automatically amend the Contract. The Employer shall issue a written instruction or variation identifying the road section, effective date, extent, available condition and asset information, funding arrangement and the mechanism for incorporating the road into the Works Contract. No expenditure shall be incurred without the approval required by the Contract.

Within twenty (20) working days after the instruction, or within a shorter period stated for an urgent transfer, the Service Provider shall participate in a joint hand-over; complete a baseline condition, road-safety and asset-inventory assessment; record photographs, coordinates, route-section and kilometre data; identify defects, backlogs, environmental and OHS risks, emergency contacts and alternative routes; and submit an initial maintenance, emergency-readiness and budget plan.

The Service Provider shall update the programme, risk register, staffing, insurance, stakeholder and RIMS arrangements, cash-flow forecast, ITIS and SARDS records, and shall prepare any Works Authorisation, variation, procurement recommendation or other document required to integrate the Transferred Road.

The Service Provider shall maintain a quarterly reconciliation between the signed Contract, approved variations and emergency instructions, gazetted or declared network information, as-built or GIS information and ITIS route-section records, with reasons and approval for every material variance in route description or length.

C3.1.4 Determination of Remuneration

The basis for determining remuneration shall be based on 4 (four) different methods, which are not necessarily mutually exclusive, namely:

- Fee based on normalised hours.
- Separate payment for services that are additional to those provided for in the normalised hours fee-based calculation.
- Time based fees; and
- Reimbursable expenses.

a) Fee determination

The determination of fees will be based on the normalised hours tendered.

Table C3.1.4(a): Remuneration payable

Section	Stage	Remuneration payable
		Routine Road Maintenance
C3.2	Detailed Assessment Phase	Fee based on Table C3.1.4(b) below
C3.3	Tender Documentation	Fee based on Table C3.1.4(b) below
C3.4	Clarification Meeting, Tender Period & Tender Evaluation	Tendered as separate payment and not part of fee
C3.5	Administration & Monitoring of the Works Contract	Fee based on Table C3.1.4(b) below plus reimbursable expenditure for site personnel

C3.6	Additional Duties, Special Services and Specialist Advice	Tendered as separate payment and not part of fee
C3.7	Off Site Materials testing	Tendered as separated payment and not part of fee
C3.8	Close Out	Fee based on Table C3.1.4(b)

Table C3.1.4(b): Percentage points for phases/stages: *Routine Road Maintenance*

Type of Service	Detailed Assessment (DA)	Administration & Monitoring of works contract (AMW)	Close out (CO)	Total
DA, AMW & CO	**15%**	**83%**	**2%**	**100%**

The fees based on Nominated Hours Tendered will be split as per Table C3.1.4(b) above.

The fee tendered and/or the hourly rate provided by the Employer for different employee categories shall include full compensation for the services required under all the different stages as specified herein, including allowances for overhead charges incurred by the Service Provider as part of normal business operations, including the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general, materials, printing, and all other costs and all profits.

Should during the project a particular future phase be unbundled, cancelled, abandoned or postponed (more than 6 months), no compensation will be applicable to the unbundling, cancellation, abandonment or postponement or to the outstanding phases. Additionally, no re-adjustment of the percentage points will be applicable.

C3.1.5 Project Cost Estimate

For the purposes of this tender, the current budget for the Works **R200 million**. The final cost of the Works will, however, depend on the strategy selected by the Employer based on the most appropriate and cost-effective options identified by the Service Provider during the design phase. Tenderers shall note that no adjustments to tendered rates will be applicable irrespective of the actual final cost of the Works.

C3.1.6 Stakeholder and Community Liaison and Social Facilitation

a) Purpose

To give effect to the need for transparency and inclusion in the process of delivering services, the Service Provider shall liaise with the project Stakeholders and affected Communities for the duration of the contract's life cycle. This shall be achieved through structured engagement with the PLC which was established for this purpose.

b) Existing contracts

The Employer currently has a routine road maintenance (RRM) contract in progress along the route. The Service Provider shall not visit the site for purposes of undertaking any investigation without first informing the Route Manager of the visit and what type of investigation is intended. The RRM contractor needs to be able to plan his accommodation of traffic duties and no inspection or investigation can take place without acquiring assistance from the RRM for safe conduct through the site or protection when undertaking intrusive or out-of-vehicle surveys. The Service Provider shall timeously liaise with the Employer and his appointed Route Manager in order to program the assistance required.

c) Stakeholders

Any Stakeholder who is affected by the Employer's operations in the locality of the project and/or who has an interest or concern in the project, either as a decision maker, participant or affected party and may include, amongst others, the following entities:

(i) Provincial departments;
(ii) Municipal departments;
(iii) Traditional authorities;
(iv) Community interest groups;
(v) Organised youth representation;
(vi) Organised women representation
(vii) Organised disabled people representation;
(viii) Organised labour representation;
(ix) Other structured community groups such as religion, education, farming, etc.;
(x) Transport industry forums;
(xi) Business sector forums;
(xii) Road user forums;
(xiii) Environmental interest groups;
(xiv) Road safety interest groups; and
(xv) Any other recognised relevant and representative structure

The project is located within Victor Khanye Local Municipality and Nkangala District Municipality, with Delmas Town being the main centre.

d) Target Area for the sourcing of Labour for Construction Contract

The target area for the sourcing of labour only needs to be defined in consultation with the Project Liaison Committee (PLC) and may typically include:

(i) One or more Provinces;
(ii) One or more Metropolitan and District Municipalities;
(iii) One or more Local Municipalities; or
(iv) One or more Wards that are wholly located within an area within a predefined radius of the construction activity.
(v) One or more of the areas listed in the definition of Designated Groups.

e) Designated Group for Sub-contracting to Works Contractor

Unless otherwise stated in the Works Contractor's documents, a minimum of 30% (thirty percent) sub-contracting provision will apply as a contractual obligation and will be restricted to:

(i) Black designated groups as defined in the Codes of Good Practice issued in terms of Section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act 53 of 2003);
(ii) Black people as defined in Section 1 of the Broad-Based Black Economic Empowerment Act, 2003 (Act 53 of 2003);
(iii) Black people who are women and who are South African citizens;
(iv) Black people who are youth as defined in Section 1 of the National Youth Development Agency Act, 2008 (Act 54 of 2008);
(v) Black people who are people with disabilities as defined in Section 1 of the Employment Equity Act, 1998 (Act 55 of 1998)
(vi) Black people who are military veterans as defined in Section 1 of the Military Veterans Act, 2011 (Act 18 of 2011);
(vii) Black people who are living in rural or under-developed areas or townships;
(viii) Small enterprises as defined in Section 1 of the National Small Enterprise Act, 1996 (Act 102 of 1996);
(ix) Exempted Micro Enterprises (EMEs) as defined in terms of the Code of Good Practice on black economic empowerment issued in terms of Section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act 53 of 2003), with an annual turnover of R10 million or less (Amended Codes of Good Practice); and
(x) Qualifying Small Enterprises (QSEs) as defined in terms of the Code of Good Practice on black economic empowerment issued in terms of Section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act 53 of 2003), with an annual turnover of R10 million and R50 million.

f) Project Liaison Committee (PLC) and Project Management Team (PMT)

A Project Liaison Committee (PLC) has either been established prior to commencement of the contract or shall be established as soon as possible by the Service Provider. The PLC represents the project's Stakeholders. The PLC consist of representatives of project Stakeholders and affected communities from the following local municipalities Victor Khanye Local Municipality, as well as the Project Management Team (PMT) and their representatives.

The PMT comprises representation from the Employer, the Service Provider and the Contractor (during construction phase). Together with the PLC, the PMT is responsible for successful project Stakeholder and community liaison and successful implementation of the Employer's Contract Participation Goals.

Where a PLC has not been established, the Service Provider, under the guidance of the Employer, shall establish such a committee within the boundaries of the Local and/or District Municipality. Allowance has been made for these requirements in the Pricing Schedule under Additional Duties.

g) Duties of the PLC

The PLC is the official communication channel through which the PMT communicates with project Stakeholders and affected communities on project matters, as well as to communicate the impact that the project has or might have on project Stakeholders and affected communities.

The PLC is also the official communication channel through which project Stakeholders and affected communities communicates with the PMT on the impact that the project has on them, or is anticipated to have on them, or on any other project matters.

The Standard Terms of Reference (TOR) for PLCs requires of the PLC to execute specific duties during each stage of the project, i.e. from project initiation to project completion. Some of these duties overlap project stages and hence, a full description is provided here.

The PLC shall execute the following duties:

Project Initiation and Design Stages:

NOTE: The principles of the TOR shall not be amended, but duties and procedures may be altered to be project specific and to improve the functionality of the PLC.

(i) Meet as often as required with the Employer and the Service Provider, to discuss and resolve the project's initiation and design stage matters, which are of interest or concern to project Stakeholders and affected communities, the Employer and the Service Provider;
(ii) Peruse the standard TOR for PLCs and make recommendations on the duties of, and procedures to be followed by, the PLC to fulfil its duties;
NOTE: The principles of the TOR shall not be amended, but duties and procedures may be altered to be project specific and to improve the functionality of the PLC.
(iii) Act in accordance to the agreed TOR for the PLC;
(iv) Inform the Employer of any training that members of the PLC require to execute its duties;
(v) Assist the Employer and Service Provider to source suitable candidates for the position of Project Liaison Officer (PLO);
(vi) Observe and verify that the procedures applied by the Employer and Engineer to select and employ the PLO were executed in a fair and transparent manner and were within the prescripts of the relevant legislation and regulations;
(vii) Make recommendations to the Employer and Engineer in identifying the project's Target Area(s), from which Targeted Labour will be employed, for inclusion in the Tender Documents and endorse the identified Target Area(s); and
(viii) Make recommendations to the Employer and Engineer in identifying the project's Target Groups for inclusion in the Tender Documents and endorse the identified Target Groups.

Project Construction Stage:

Point 3: Community Liaison Officer (CLO) or Project Liaison Officer (PLO) selection to be done under the auspices of the PLC.
(i) Assist the Employer and the Engineer to source suitable candidates where applicable, for the position of PLO.

(ii) Observe and verify that the procedures applied by the Employer and Engineer to select and employ the PLO were executed in a fair and transparent manner and were within the prescripts of the relevant legislation and regulations.

Point 4: Definition of a target area (sometimes referred to as a local area or traffic area) to be done under the auspices of the PLC.

(i) Make recommendations to the Employer and Engineer in identifying the project's Target Area(s), from which Targeted Labour will be employed for inclusion in the tender documents and endorse the identified Target Area(s).
(ii) Make recommendations to the Employer and Engineer in identifying the project's Target Groups for inclusion in the tender documents and endorse the identified Target Groups.

Point 5: Setup a database of contractors and suppliers (and consultants where relevant) to be done under auspices of the PLC. The final database to be signed off by the PLC.

(a) Make recommendations to the PMT in establishing the eligibility criteria and tendering processes and procedures to be followed to employ Targeted Labour and sub-contract Targeted Enterprises; endorse the agreed criteria and employment and sub-contracting methodology(ies).

Point 6: Setup of database of local labour for the targeted area to be done under auspices of the PLC. The final list to be signed off by the PLC. An agreed system of labour selection from the database is to be agreed at the PLC.

(i) Peruse and endorse the Project Database(s) compiled by the PMT from which Targeted Labour will be employed.
(ii) Verify that the criteria and methodology(ies) applied by the contractor to employ Targeted Labour and sub-contract Targeted Enterprises were executed in a fair and transparent manner, and within the Employer's and Government's Supply Chain Management Policies.

Point 7: Hand-over of signed-off databases for sub-contracting and labour to contractor for open tender process and recruitment respectively done by the PLC.

Point 8: Tender to be conducted by contractor using government principles (e.g. public opening of received bids, announcement of bidders and prices). Tabling of winning bidders in the PLC.

(i) Receive reports and ensure transparency in the appointment of Targeted Enterprises in local projects of the Employer notwithstanding that the authority to appoint such Targeted Enterprises shall remain with the Employer. (Observer status)

Point 9: Appeals on the tender process to be escalated to the Employer for an independent review.

(i) Agree with the PMT on a dispute resolution mechanism to resolve any disputes that may arise between the PMT and the PLC, project Stakeholders and/or affected communities.
(ii) Assist the PMT to liaise with project Stakeholders and the affected communities to resolve any disputes between the Employer, Engineer and/or contractor and project Stakeholders and the affected communities, which occurred due to the project.
(iii) The Employer's ruling on any dispute regarding the tender process shall be considered to be final.

Point 10: Capability assessments of contractors and suppliers to be done under auspices of PLC prior to tender stage, to identify any deficiencies in skills and experience. For labour, skills assessments are to be done at recruitment stage.

Point 11: Contractor development support and training to be coordinated and conducted, ahead under the auspices of the PLC, prior to project commencement.

(i) Make recommendations to the PMT on the training needs, eligibility criteria and selection criteria, for the provision of training to Targeted Labour, Targeted Enterprises, project Stakeholders and the affected communities.
(ii) Observe and verify that training programmes and support programmes, which the contractor committed to, were implemented and executed as intended.

Point 12: Identification of works areas that are deliverable by local service providers, and areas where capabilities are not available locally. All works areas where capabilities are not available locally shall be imported and locals will be given an opportunity to learn.

Point 13: Formal contracting arrangements to be ensured for all projects.

(i) Verify that the conditions of employment and the conditions of sub-contracting, in the employment of Targeted Labour and sub-contracting of Targeted Enterprises were applied in a fair and transparent manner and according to the Employer's employment and sub-contracting requirements.

Point 14: Communication to be streamlined through the PLC and used to manage expectations of local business and communities.

Additional Duties of the PLC:

(i) Inform the entities whom they represent of any project matters which the PMT wishes to communicate with project Stakeholders and the affected communities.
(ii) Inform the entities whom they represent of any project matters that are impacting or may impact, either positively or negatively, on project Stakeholders and the affected communities.
(iii) Inform the PMT of Stakeholder and/or community requests and/or needs which could possibly be addressed within the project's Scope of Work.
(iv) Inform the PMT of any road safety concerns within the project's Targeted Area(s) and advise the PMT of possible mitigating measures and/or road safety programs that will be most feasible for acceptance by the affected communities to promote road safety.
(v) Inform the PMT of any project matters that are impacting, or anticipated to impact, negatively on project Stakeholders and the affected communities.
(vi) Meet prior to the monthly site meeting, or as may be required, to discuss and resolve project matters, which are of interest or concern to project Stakeholders and the affected communities, the Employer, the Engineer and/or the contractor.
(vii) Inform the Employer of any training that members of the PLC require to execute its duties.
(viii) The PLC shall have full powers to decide on any matter which they are empowered to decide on falling within the Project Area and outlined duties.
(ix) The PLC may assign members to report back to specific sectors and/or constituencies within the PLC.
(x) The PLC may establish working groups and/or ad-hoc committees to fulfill its work subject to fulfill tasks as per contract. This must be recommended by the PLO and authorized by the Employer.

h) Duties of the PMT

The PMT, which consists of the Employer, Service Provider and the Contractor, or their representatives, is a party to the PLC and hence, is co-responsible for successful project Stakeholder and community liaison. The PMT is also responsible for the successful implementation of the Employer's Targeted Labour and Targeted Enterprise utilisation and development goals.

In terms of implementing the Employer's Targeted Labour and Targeted Enterprise utilisation and development goals, the PMT shall, where required, execute the following duties:

(i) Make recommendations to the Contractor in the identification and structuring of the work packages to be sub-contracted (if any) to Targeted Enterprises and agree to the scope and extent of the work packages;
(ii) Verify that the Project Database(s) compiled by the PMT from which Targeted Enterprises will be sub-contracted, has been updated prior to the letting of every new set of sub-contracts;
(iii) Approve all Databases, tender procedures, tender documents, tender submission requirements and adjudication processes for the sub-contracting of Targeted Enterprises;
(iv) Review all tender adjudication reports and monitor that the criteria and procedures applied by the Contractor to sub-contract Targeted Enterprises are executed in a fair and transparent manner and are within the Employer's and Government's Supply Chain Management Policies;
(v) Approve sub-contract agreements and ensure that the conditions of sub-contracting with Targeted Enterprises are fair and transparent and within the prescripts of the contract requirements;
(vi) Monitor the management of Targeted Enterprise sub-contracts and ensure that conditions such as the application of penalties, the termination of contracts, etc. are applied in a fair and transparent manner and within the prescripts of the agreement;

(vii) Verify that the Project Database(s) compiled by the PMT from which Targeted Labour will be employed is updated prior to every new labour intake;
(viii) Monitor that the criteria and procedures applied by the Contractor to employ Targeted Labour are executed in a fair and transparent manner and is within the contract requirements;
(ix) Monitor that the conditions of employment of Targeted Labour are applied in a fair and transparent manner and within the prescripts of the current and relevant Labour Legislation;
(x) Make recommendations to the Contractor in the identification of the training requirements of Targeted Labour and Targeted Enterprises and approve the proposed training programmes; and
(xi) Monitor that training programmes and support programmes, which the Contractor committed to, are implemented and executed as intended.

i) Targeted Labour Database

A Project Database of Targeted Labour will be compiled by the PLO, with input from the PLC for the Target Area(s). Once endorsed by the PLC the PLO shall utilise this Database to source Targeted Labour as required by the Contractor.

The Project Database shall be updated as and when required to reflect new employment seekers in the labour market. Only labour recruited from the Project Database will be measured for Contract Participation Performance (CPP).

j) Targeted Enterprises Database

A Project Database of Targeted Enterprises from the Target Area(s) will be developed by the Service Provider during the Design Phase, from the National Treasury Central Supplier Database and from the CIDB contractor database, for each Target Area.

The Service Provider shall also assist Targeted Enterprises from the Target Area with registration on the National Treasury Central Supplier Database.

C3.1.7 Permits and authorisations

The compilation of any plans/reports necessary to comply with the relevant environmental legislation pertaining to applications to operate quarries and borrow pits will be treated as a normal sub-service.

Procurement of sub-service providers shall be in accordance with the requirements of clause C3.1.15. As approvals are essential prior to the commencement of the Works, the Service Provider shall be responsible to ensure that all submissions to the relevant approving authorities is completed by the milestone date tabled in clause C3.1.8.

C3.1.8 Project Programme

The Service Provider shall programme its duties in such a manner so as to complete the various phases of the total project within the milestone dates specified below.

The Employer's programme for this project is as follows:

	Project Phase	**Phase Completion Date**
A	Submission of Tenders / Proposals	TBC
B	Appointment of Service Provider	TBC
C	Submission of Road Condition Report	TBC
D	Submission of Draft Tender Documents for the Works	TBC
E	Submission of Final Tender Documents for the Works	TBC
F	Tender Advertisement	TBC
G	Site Inspection	TBC
H	Tender Closure	TBC
I	Submission of Tender Evaluation Report	TBC
J	Works Contract Handover	TBC
M	Submission of draft Contract Report and as-built data	Within 3 months of issue of Taking-over Certificate for the Works

N	Submission of final Contract Reports and as-built data	Within 1 month of issue of Performance Certificate for the Works

The Service Provider shall submit a programme indicating these milestones to the Employer within 14 days of the date of the letter of acceptance of tender.

C3.1.9 Penalties and delays

Penalties shall be applied for poor performance as specified in the Contract Data. The quantum of the penalty shall be as listed in the Contract Data. Draft reports and documents shall be submitted to the Employer at least seven working days prior to any meetings scheduled for the discussion and finalisation thereof. The Service Provider shall thus take this period into account in compiling their programme.

Any delays to the above programme that are attributable to the Employer, or to other approved mitigating circumstances, will not be subject to penalties. In the event of such instances arising, any extensions of time granted shall be limited to the equivalent number of calendar days attributable to each instance.

Penalty changes payable shall be as follows:

a) Failure to meet milestone dates in the Project programme = R2 000.00/day (excl. VAT) subject to a maximum of 10% of the Contract Value.
b) Failure to capture structures inventory and condition updates onto ITIS before issue of Taking-Over-Certificate (TOC) = R5000.00/structure (bridges and major culverts) per week or part thereof subject to a maximum of R50 000.00 (excl. VAT) per structure.
c) Failure to disclose Sub-contractors, value of Subcontract = up to 10% of the Contract value.
d) Late capture of monthly ITIS PIM date = R2,000.00/day (excl. VAT) applicable from the first day of the new month following the previous month end, subject to a maximum of 10% of the Contract Value.
e) Unresolved errors in monthly ITIS PIM data captured without evidence of logging issues = R2,000.00/day (excl. VAT) applicable from the first day of the new month following the previous month end, subject to a maximum of 10% of the Contract Value.
f) Late processing and submission of Contractor's Payment Certificate = R2,000.00/day (excl. VAT) applicable from the first day of the new month following the previous month end, subject to a maximum of 10% of the Contract Value.
g) Any audit finding raised against a contract by Internal Audit, AGSA, DOL/DFE related to duties of the Service Provider = R20,000.00/finding (excl. VAT), subject to a maximum of 10% of the Contract Value.
h) Late issuing of Job Instructions for contractor using ITIS Desktop/Mobile App for:
   (i) Pothole reports on Vala Zonke App by public for which a Job Instruction has not been issued to Contractor= R2,000.00day (excl. VAT);
   (ii) Drains/culverts/bridges that are silted up or where flood debris is blocking waterways within road reserve as identified from Inspections = R2,000.00/instance (excl. VAT);
   (iii) Grass cutting causing unsafe conditions = R2,000.00/day (excl. VAT) for each calendar day that Job Instruction is issued late, subject to a maximum of 10% of the Contract Value
   (iv) Missing/damaged regulatory and warning signs causing unsafe conditions = R2,000.00/day (excl. VAT);
i) CE not performing physical monthly route verification inspection of quality of work done using the ITIS / Mobile App on a monthly basis = the monthly sum to fulfill the duties of the Engineer as per Payment Item 35.01(a)(i).
j) Late submission of any other deliverable as required by the contract but not specifically stated = R2,000.00/day (excl. VAT) applicable from the first day after the deliverable became due, subject to a maximum of 10% of the Contract Value.

C3.1.10Personnel Requirements

a. Key Persons

The Key Person required for this project is listed in Form C1.2.2 Contract Data: Information provided by the Employer. The tenderer must list proposed candidates for the prescribed position in the core team in Form C1.2.3 Contract Data: Information provided by the Tenderer. Each candidate must submit a CV of appropriate experience signed by the proposed candidate and the authorised person of the Service Provider and complete the relevant B1 and B2 forms included in the Returnable Schedules. The proposed candidate shall be a

permanent staff member of the tenderer and not a contracted person, this must be indicated on form B2 and a signed letter of confirmation from the candidate must be submitted with the relevant B-forms. The threshold of the Technical Proposal indicates the importance of the quality and standard of engineering and administration expected of the Service Provider. Any changes to the Key Person, as proposed in this tender, after award will thus only be permitted in exceptional circumstances. In such circumstances the competence and experience of any replacement personnel shall also meet the threshold of the Technical Proposal. Re-evaluation by the Employer of any replacement personnel shall be paid for by the Service Provider as specified in Clause C3.6.3.

b. Minimum Requirements

The minimum qualifications and requirements for the Service Provider's personnel shall be as indicated in the table below.

Position	**Contracts up to 7CE or 7500 average daily traffic**		
	Minimum Technical Qualification or Registration	**Minimum Relevant Experience (years)[1]**	**Other Requirements**
Contract Engineer	Pr Eng or Pr Tech Eng[2]	10	Permanent staff member of the tendering entity
Assistant Contract Engineer	Candidate Engineering Technologist[2]	8	Permanent staff member of Targeted Enterprise
Route Manager	Pr Techni Eng[2] or Pr CM[3]	7	
	National Diploma or NQF 6 in Civil Engineering and Candidate Engineering Technician[2]	12	
Assistant Route Manager1[4]	Candidate Engineering Technician[2]	5	
Assistant Route Manager2[4]	Candidate Engineering Technician[2]	Not Applicable	Employment of the Targeted Enterprise
OHS Specialist	**Design Phase:** SACPCMP[3] registration as a Professional Construction HSE Agent **Construction Phase:** SACPCMP[3] registration as a Construction HSE Agent or Manager	As required by SACPCMP[3]	

1 Relevant experience is the actual number of years, measured from the date of acquiring the **base** NQF qualification (either B.Eng / BSc.Eng / B.EngSci or BSc / B.Eng Tech (Hon) PGDip (Engineering) / M.Eng for Pr.Eng or National Higher Diploma / National Diploma Eng / Masters Diploma / BTech / B.Eng Tech / Dip Eng / Adv Dip Eng / Adv Cert (Engineering Practice) plus Adv Dip Eng for Pr.Tech Eng and National Diploma / Dip Eng / Dip Eng Tech / Adv Cert (Engineering Practice) / Higher Certificate (Eng) / Adv Cert (Engineering) / Adv Cert (Engineering Practice) for Pr.Techni Eng), or measured from the date of acquiring the minimum required professional registration, worked in the field of the specified position. For the road safety audit team leader the field shall be road safety design and/or traffic and transportation engineering and/or geometric design.

2 Registered with the Engineering Council of South Africa (ECSA) or any other international body recognised by the Employer, i.e. Washington Accord, Dublin Accord and Sydney Accord.

3 South African Council for Project and Construction Management Professions (SACPCMP).

4 A minimum of 2 (two) Assistant Route Managers shall be required of which 1 (one) must be a black person and 1 (one) preferably be female.

c. Limitations on commitment of Key Person

The Key Person (Contract Engineer) and Assistant Contract Engineer (if applicable) will be limited to participate in a maximum number of 6 (six) RRM contracts with the Employer which will be complete after the Taking-Over Certificate is issued to the Contractor.

C3.1.11 Meetings and Liaisons

a) Meetings and liaisons between the Employer and the Service Provider

Meetings between the Employer and the Service Provider are formal occasions. The Employer shall perform the duties of chairperson and the Service Provider the secretarial services. The Service provider shall submit draft minutes to the Employer for review before distribution which shall not be later than 14 (fourteen) calendar days after the meeting. Meetings and liaisons shall be scheduled according to the Service Provider's approved programme to discuss and record the progress of the Services.

Draft copies of all reports, design and tender documents submitted for review shall be discussed at specially convened meetings prior to their finalisation.

Attendance at the meetings and liaisons shall include joint venture members and/or Targeted Enterprise(s) (if any), sub-service providers and the designated key persons. A key person shall not be substituted by another Service Provider employee unless express permission for this has been sought from and approved by the Employer in writing. The Employer shall have the right to delay a meeting because of the non-availability of a key person and any delay costs so incurred shall be for the account of the Service Provider.

i) Project hand-over meeting

The date of the meeting will have been fixed and notice for it and an agenda included with the letter of acceptance of the Service Provider's offer.

This meeting provides the opportunity for administration details to be finalised. Included among these, but without providing limits to what may be required shall be:

- Signing and initialling of the contract document;
- Confirmation of prescribed insurance cover, including that of joint venture members (if any);
- Confirmation of vendor registration;
- Delivery of a flash drive containing all relevant forms and procedures needed for effective project administration.

ii) Progress meetings

The date for the first progress meeting shall be fixed at the hand-over meeting mindful that it cannot take place until the Service Provider has conducted his *in loco* inspection of the project site. The first progress meeting shall not be scheduled longer than six calendar weeks after the hand-over meeting. Proposals for investigation and intrusive testing will be discussed at this first meeting.

The Service Provider's programme, as envisaged at the hand-over meeting shall be fine-tuned and approved at the first progress meeting. The approved programme shall identify the number and frequency of progress meetings. They may be reduced or increased as necessary to achieve the milestone date of delivery of the approved detailed design.

Topographical surveys and the Land Acquisition process must form an integral part of the Service Provider's programme and must be listed separately in their proposed programme.

In addition, the Service Provider's programme must have careful regard to the need to produce Property Reports at the earliest possible time. This aspect may necessitate the presence of the PSP at this meeting.

The purpose of progress meetings is to discuss the development of the project design and the minutes produced shall form the record of progress against programme. The minutes shall record the discussions held and the decisions made.

Duties of some sub-service providers are not directly related to the development and production of the project design; nevertheless, because of the severe impact their progress can place on the programme, their presence

at, and participation in, design progress discussions is not negotiable. They shall attend progress meetings and any delays caused by postponements due to their non-availability shall be to the account of the Service Provider.

b) Other project related meetings

The Service Provider must ensure that proceedings of meetings (whether formal or informal) are formally documented. These meetings may be between the Service Provider, sub-service providers, the PSP and/or other Stakeholders. The Employer may attend these meetings.

i) Project Liaison Committee (PLC) meeting

The PLC will meet on an ad-hoc basis during the Design Stage of the project to discuss and resolve project related issues and matters of interest or concern to the project Stakeholders and communities, the Employer and the Service Provider.

The PLC will meet prior to the monthly site meetings or as may be required from time to time during the Construction Phase to discuss and resolve project related issues and matters of interest or concern to the project Stakeholders and communities, the Employer and the Service Provider.

ii) Works Contract Hand-over meeting

It is required that the Contract Engineer and the Route Manager attend the works contract hand-over meeting.

C3.1.12 Risk Management

The concept of risk shall be discussed at all meetings, starting with the hand-over meeting. The Service Provider shall identify restrictions and limitations on the design development that the various processes may impose, estimate the probability that they will impact on performance, advise what measures are proposed to avoid them and what mitigating measures could be taken to mitigate in the event they do occur. This creates a risk register that must be raised and discussed at each successive progress meeting.

Used properly, the risk register will predict or pre-warn of change; as the probability of an event increases so will the need for a Works Authorisation to approve extensions of time or allocation of more funds become more certain.

A base risk register shall be discussed and recorded at the hand-over meeting. It shall be re-visited at each successive progress meeting to confirm the status of each and record any changes. The opportunity to add more or remove others will also be discussed at the progress meetings.

A fundamental element of risk assessment, but by no means the only one, will be economic affordability meaning that each design strategy must be separately and broadly estimated for comparison against the basis of the Employer's budget for the project. In essence, this analysis relates to testing the economic and technical feasibility of the Employer's envisaged design strategy. Similarly, other identified risks will have a cost element to them and these must also be brought to the Employer's attention for discussion and decision. The Employer may require the Service Provider to make us of its standard risk reporting format.

C3.1.13 Document Management

Three (3) hard copies (or otherwise agreed with the Employer) of draft reports and/or documents shall be submitted 10 (ten) calendar days prior to the meeting dates for discussion purposes. All changes emanating from these meetings shall be incorporated into a final version. The record of the changes shall be by means of track changes to the draft version and submitted in electronic format.

When a volume consists of more than 1 book, the number of the volume appears on the cover and on the title page, together with the number of the book, e.g. Volume 3: Book 1 of 3, or Volume 3: Book 2 of 3

All reports and/or documents shall utilise the Employer's pro-forma formatting without alteration unless specific request for a change has been submitted to and approved by the Employer. Pro-forma report formats are contained in Part C4: Site Information.

The table below lists the requirements of documentation that the Service Providers shall apply, unless otherwise agreed with the Employer.

Table 3.1.13: Documentation Requirements

Document Characteristics	Draft Reports/Documents	Final Reports/Documents	Books of Drawings
Page	A4 80g/m²	A4 80g/m²	A2 80g/m²
Cover page layout	Employer's pro-forma works document cover page with appropriate wording for the specific report/document compiled		
Cover	White 80g/m²	Reports: Tokai Blue 160g/m² Documents: Red 160g/m²	Draft: White 80g/m² Final: Red 160g/m²
Printing All left-hand margins to be 2.5cm Printing to be left justified	Back-to-back pages	Reports: back-to-back Contract document: back-to-back except: - New sections - All returnable schedules - Pricing schedule	All on separate pages
Binding Maximum thickness to be 3cm	Plastic ring binders	Reports: plastic ring binders Contract documents: stapled, glued and bound	Draft: Stapled and bound Final: stapled, glued and bound
Number of paper copies	3 (three)	Reports: 1 (one) Tender documents: 1 (one) Tender evaluation: 2 (two) Contract documents: 2 (two) original for signature and 1 (one) copy	Draft: 3 (three) Final: 2 (two) original for signature and 1 (one) copy
Number of electronic copies	1 (one)	1 (one) 1 (one) of signed contract	1 (one)
Electronic format	MS Office 2013 and PDF	MS Office 2013 and PDF	PDF

C3.1.14 Safety

This part of the specification has the objective to assist the Service Provider entering into contracts with the Employer that they comply with the Occupational Health and Safety (OH&S) Act, No 85 of 1993, as well as all applicable Regulations. Compliance with this document does not absolve the Service Provider from complying with minimum legal requirements and the Service Provider remains responsible for the health and safety of his employees and those of his Mandataries. The Service Provider shall therefore include this part of the specification to any contract that he may have with sub-service providers and/or suppliers.

This part also 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 the Service Provider shall comply with in order to reduce the risks associated with this contract, which may lead to incidents causing injury and/or ill health. In this matter the spirit and intention of Regulation 5(1)(l) of the Construction Regulations, 2014, regarding negotiations between the parties, related to the contents and approval of the Health and Safety Plan, must be complied with.

The Service Provider shall on award or the contract become the Client's Agent in terms of Construction Regulation 5(5); (6) and (7) of the Occupational Health and Safety Act (Act 85 of 1993). The duties and responsibilities as the Client's Agent are as prescribed in Construction Regulation 5(7).

For purposes of clarity typical duties required of the service provider are given below, but they shall not be interpreted as being exhaustive and if any conflict between them and the legislated Construction Regulations occurs the latter shall rule.

a) Project Specific Requirements

The following is a list of Baseline Risk Assessment and project specific health and safety specifications prepared by the Client in terms of Construction Regulation 5(1)(a) and 5(1)(f).

i) Baseline Risk Assessment for Design Phase

- Working in elevated positions (e.g. Bridge Inspections)
- Working over water environments (e.g. Bridge Inspections)
- Excavation – locating existing underground services, digging test pits
- Manual handling – setting up surveying equipment
- Ergonomic risks
- High & Low voltage power lines – overhead & underground
- Work in close proximity to railway lines
- Uneven ground surfaces
- Personal safety & security risks
- Traffic Control (Ensure Correct Signage at Correct Distances)
- Working from ladders
- Exposure to noise
- Working in close proximity to traffic
- Working with hot materials
- Radio Active equipment
- Hazardous Chemical Substances
- Flammable Materials
- Driving to and from site
- Biological risks e.g. bees, snakes, spiders, etc.
- Hazardous Biological Agents
- Environmental risks
  - Bad weather conditions,
    - rain,
    - lightning,
    - wind,
  - poor visibility
  - heat exposure – dehydration
  - cold environment

ii) Baseline Risk Assessment for Supervision Phase

- 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
  - Temporary fuel storage, where applicable
  - Laboratory establishment, where applicable (Client responsibility)
- Dealing with existing structures – possibility of asbestos
- Location of existing services, e.g. gas, telecommunications, electrical supply and similar
- 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/her work activities)
- Health risks arising from neighbouring as well as own activities and from the environment, e.g. threats by dogs, bees, snakes, lightning, etc.
- Exposure to a water environment
- 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 such as silicosis or asbestosis, where applicable
- Hazardous Biological Agents that could lead to epidemics and pandemics
- Use of portable electrical equipment including:
  - Angle grinder
  - Electrical drilling machine
  - Circular saw
  - Generator

- Excavations including:
  - Ground/soil conditions
  - Trenching
  - Shoring
  - Drainage of trenches
- Welding including:
  - Arc welding
  - Gas welding
  - Flame cutting
  - Use of LP gas torches and appliances
- Loading and off-loading 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
  - Sit-on roller
  - Plate compactor
  - Front end loader
  - Mobile cranes and the ancillary lifting tackle
  - Grader
  - Parking of vehicles and mobile plant
  - Towing of vehicles and mobile plant
- Use and storage of flammable liquids and other hazardous substances, e.g. petrol, diesel, cement, asphalt, bituminous materials and similar
- 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 (High and low)
- Work adjacent or in proximity of railway lines
- Work adjacent or in proximity of traffic
- Working at heights
- Working in confined spaces – tunnelling
- Formwork and support work (temporary works) including scaffolding
- Demolition work, where applicable
- Bulk mixing plant, where applicable
- Environmental impacts such as pollution of water, air or soil

b) Design Phase

The Service Provider or his registered Professional Construction Health & Safety Agent must identify elements of the design that are inherently dangerous or hazardous to the health and safety of Contractor employees during the construction phase and design in such a manner as to mitigate or eliminate the risk where possible. To this avail the Service Provider (or his Agent as outlined above) must prepare a baseline risk assessment for the intended construction work project, and make the same available to the Employer. This duty of identification continues into the construction phase of the project regardless that the designer may not be monitoring the construction phase. All identified dangers/hazards are to be listed and brought to the attention of potential contractors by means of the baseline risk assessment as outlined above and envisaged in Construction Regulations 5 (1) (a); (b) and (c).

For example, staging for bridge decks or sharing of unstable excavations is the designer's responsibility to identify and notify of the health and safety risk. It is also the designer's responsibility to undertake inspections at critical phases of construction to ensure that the identified risks are continuously and appropriately mitigated.

c) Construction Phase

During the construction phase the supervising Service Provider must ensure that the Employer's duties are continuously fulfilled, meaning that the Service Provider has to include amongst its permanent monitoring staff

at least one appropriately trained member. In addition the Service Provider must conduct monthly internal audits to ensure the site personnel are adhering to the statutory requirements. Costs for performing this duty are recoverable via the rate offered for this scheduled item of work. An Occupational Health and Safety Audit Questionnaire is included in Appendix E in Part C4 for this purpose. This audit may be conducted by either the appointed registered Professional Construction Health and Safety Agent (Pr. CHSA) or a registered Construction Health and Safety Manager that is contracting-in or employing a Pr. CHSA or who is contracted-in or employed by a Pr. CHSA.

The Employer may order external audits the costs of which are separately recoverable as a disbursement to the specialist sub-service provider selected to conduct the audits.

Furthermore, the Service Provider must, in compliance with Section 24 of the Occupational Health and Safety Act (Act 85 of 1993) report immediately to the Employer's Health and Safety Specialist and the relevant Project Manager the details of a Section 24 incident, including confirmation that the Contractor has similarly reported the same incident directly to the Department of Labour.

d) Health related Epidemics and Pandemics

The Service Provider shall, as far as reasonably practicable make provision for health-related epidemics and pandemics that is declared by Authorities. The Employer is aware that this provision will not speak to specific cases. Once the nature and scale of the epidemic or pandemic is known, the Service Provider must ensure that the requirements stipulated in the Hazardous Biological Agents (HBA) Regulation are adhered to and in particular the following as described in the mentioned Regulation:

- Information and training of employees
- Duties of person that may be exposed to HBA's
- Risk Assessments by the Employer (Service Provider)
- Monitoring exposure at the workplace
- Medical surveillance of employees
- Keeping of records
- Control of Exposure to HBA's
- Personal Protective Equipment and facilities
- Maintenance of control measures and facilities
- Prohibitions

e) General Occupational Health and Safety Provisions

Site specific health and safety specifications for the intended construction work based on the Baseline Risk Assessment in included in Appendix E in Part C4.

NOTE: The above duties shall not be interpreted as being exhaustive and if any conflict between them and the legislated Construction Regulation arises, the latter shall rule.

C3.1.15 Procedure for procurement of sub-service providers

A sub-service is taken to mean any service necessary for the production of the project design and later construction, which is performed by someone other than the Service Provider. A sub-service procured directly by the Service Provider requires the Service Provider to enter into a sub-service agreement with that sub-service provider. The relationship between the Service Provider and sub-service provider is that of contractor/sub-contractor.

Another type of sub-service is less direct because the service required has already been procured by the Employer under a separate agreement. The role of the Service Provider in the management of this sub-service is that of the Employer's agent.

In both cases the Service Provider is responsible for the performance of the sub-service.

Procurement of a sub-service shall be undertaken by means of a quotation/tender process. The Service Provider shall compile and issue relevant and approved terms of reference, together with the relevant work/pricing schedules, in accordance with the Employer's standard pro-formas and Supply Chain Management and procurement policies. This will require the Service Provider to advertise for an open tender process or invite quotations from identified potential sub-service providers and submit tender documents to the relevant regional

office for collection and receipt of the tenders by that office. Submitted quotations/tenders, in a sealed envelope, directly to the Employer's regional office by the date and time agreed, will be opened in public by the Employer's delegated staff. The Service Provider shall remove under signature all submitted offers for analysis and submit and report with recommendations to the Employer for approval prior to the appointment of any sub-service provider. Once approved, the Service Provider shall enter into an agreement with the sub-service provider with a copy of same submitted to the Employer.

Service Providers appointed on a project are not permitted to bid for any sub-service related to the project.

The minimum requirements for different types of sub-services to be procured under provisional and/or prime cost sums are described in Part C4: Annexure I.

C3.1.16 Employer's Integrated Transportation Information System

The Employer has developed a comprehensive information management tool called ITIS (Integrated Transportation Information System) to address all facets of its strategic and tactical planning, design, construction and maintenance of the entire road network. This provides support for the management tasks of the Employer and to allow the personnel to make technical decisions more quickly and efficiently.

ITIS is an integrated approach to the sharing and inter-relating of technical performance information for the Employer and relies on people following procedures to populate system with data. ITIS currently consist of the following platforms:

- ITIS Web – Web enabled portal providing online access to various functions, workflows and reports.
- ITIS Desktop – Offline data capture tool enabling the capture of information offline, validation and then synchronisation of data with the ITIS database.
- ITIS Mobile – Application (Android 6 or later) that allows the in-field capture of information using a smart phone or tablet (must have camera and GPS), validation and then synchronisation of data with the ITIS database.

The Employer then has several ITIS modules running on any of the above ITIS platforms which affect the Consultant and Contractor, who will need to use these modules to perform certain procedures and to provide required information. The current modules applicable to routine road maintenance and their description are as follows:

(i) Contract Module – management of contracts;
(ii) Routine Road Maintenance Module - issuing of job instructions (estimates, photographs and workflows) and preparing the payment certificate;
(iii) Incident Module – recording of incidents on site; and
(iv) Project Information Module – uploading of employment and training data.

User manuals for the various functions can be downloaded from https://itis.nra.co.za/Portal/MyAccount/UserManuals after the successful registration as a public user. The ITIS public user registration procedure is explained in the document as attached in Part C4: Appendix G.

C3.1.16.1 Routine Road Maintenance ITIS Module

The Employer's ITIS module is managed by the Engineer, which records the work done and prepares a payment certificate. The timelines for the various stages of the Interim Payment Certificate from the initial preparation by the Engineer, to the submission by the Engineer to the Employer for payment, will be identified by the Employer, and may vary in certain months due to financial deadlines, or shutdown periods.

The workflow sequence is as follows:

(i) Work is identified by the Engineer or Contractor.
(ii) Engineer prepares an interim Job Instruction using the ITIS mobile application for the work to be executed.
(iii) Contractor determines whether he will do the work or allocate the work to an appointed sub-contractor using the ITIS mobile application.
(iv) The Engineer then issues the finalised Job Instruction for the work to be executed, complete with measurement and rates of the work to be executed via the ITIS mobile application.
(v) On completion of the work, the Contractor provides measurement of the work executed via the ITIS mobile application, which the Engineer checks for quality and measurement acceptance.

(vi) The Engineer signs off the details of the Job Instruction, partially or fully completed, on the ITIS module.
(vii) On a measurement date determined by the Engineer the completed Job Instructions shall be included in an ITIS payment certificate, the Engineer shall provide a draft ITIS payment certificate to the Contractor for checking purposes.
(viii) The Contractor shall notify the Engineer of any amendments or corrections to the draft ITIS payment certificate.
(ix) The Engineer shall then prepare the Interim Payment Certificate from ITIS module for submission by the Contractor as his Statement in terms of sub-clause 14.3 of the FIDIC Conditions of Contract, for approval by the Engineer and submission to the Employer for payment.

C3.1.17 Participation of Targeted Enterprises

The Employer may stipulate the involvement of Targeted Enterprise(s) in the project design and construction as a mechanism to broaden the economic share of the national spend on engineering services and as a means to hasten and improve the transfer of technical skills.

The Service Provider's Targeted Enterprise(s) become a contractual commitment upon award.

a) The Targeted Enterprise(s) shall be involved throughout the project stages and the percentage tendered in the Contract Data shall be applicable to actual work split (excluding all provisional and prime cost sums but including site staff salaries) amongst the following stages:
- Project Assessment stage
- Investigation for Design Development
- Design Development stage
- Tender Documentation
- Clarification Meeting, Tender Period & Tender Evaluation
- Administration and Monitoring of the Works
- Additional duties, special services and specialist advice
- Quality control
- Close out

b) The use of Targeted Enterprise personnel as site staff during the administration and monitoring of the Works phase is included as part of the percentage tendered in the Contract Data.

C3.1.18 Training

a) Service Provider's staff and Targeted Enterprise

The Employer encourages training of candidate engineers or undergraduates requiring experiential training on this project. Training of the Service Provider's own permanent staff, temporary staff or Targeted Enterprise involved in this project becomes a reportable monthly event in terms of time and cost attributable to the Employer's spend from its allocated budget. Separate allowance has been made to train the Service Provider's and Targeted Enterprise's staff as assistants to certain required positions.

b) Employer's trainees

The Employer may enter into a separate arrangement with the Service Provider for training of its own permanent employees as a secondment for the express purpose of providing its candidate engineers with design and/or site supervision experience. The Employer may also enter into an arrangement with the Service Provider to provide experiential training to students.

The design phase provides the opportunity for students and candidate engineers to receive training. Three distinct categories of training are recognised. The first, and most formal, is the placement of the Employer's candidate engineers with the Service Provider for training distinctly geared to professional registration with the Engineering Council of South Africa (ECSA). The training provided shall be predominantly, but not exclusively, related to this project and may be subject to scrutiny and inspection in loco by the Employer who is responsible for candidates' remunerations. The trainees are expected to work according to the Service Provider's terms and conditions of employment, especially those related to confidentiality. They are to be treated as if they were the Service Provider's own full-time personnel. No allowances shall be made for working overtime. Where circumstances justify the need to pay for the accommodation of students, this shall be discussed with the Employers Project Manager.

Less formal will be experiential training the Service Provider is requested to provide to university or university of technology undergraduate students. The training provided must be in accordance with the academic institution requirements.

The Service Provider, apart from providing the technical training, shall also provide trainees with all the tools (including appropriate information technology hardware and software) and space necessary to carry out engineering or survey work as if they were the Service Provider's own permanent staff.

Reporting on training progress of each candidate engineer and student shall be compiled according to the formats and intervals set by ECSA (for engineering students) or SAGC (The South African Geomatics Council).

C3.1.19 Contract(s)/Agreement(s) with Targeted Enterprise(s)

The Service Provider shall enter into a contract/agreement with the Targeted Enterprise(s) to provide them with the opportunity to participate in SANRAL projects under their guidance. Copies of the contract/agreement(s) shall be provided to the Employer.

C3.2 DETAILED ASSESSMENT PHASE: ROAD CONDITION REPORT

C3.2.1 Scope

This section covers the part of the design process which requires detailed visual assessment surveys for the compilation of a Road Condition Report.

C3.2.2 Standards

Detailed visual assessments shall be carried out. A Road Condition Report shall be submitted to the Employer prior to the preparation of tender documents. An example of a Road Condition Report is included in Annexure A.

C3.2.3 Existing data

Existing information with respect to the relevant project is given in Part C4: Site Information.

C3.2.4 Visual condition survey

The Service Provider shall carry out a detailed visual assessment survey of the pavement's existing condition utilising experienced personnel in order to ascertain the current overall pavement condition. This survey shall also include the identification of any other associated aspects located within the road prism affecting the functionality/structural integrity of the pavement and/or road safety issues including:

- Detailed description of interchanges and intersections
- Road furniture and concrete drains information
- Pavement Management System information
- Traffic information
- Historic Road Maintenance information
- Sub-contractor's information
- Future maintenance and rehabilitation projects
- Bridge Joints

The Service Provider shall carry out a detailed visual survey of all additional SANRAL properties forming part of the site.

The survey shall include:

- Grass cutting and bush clearing
- Fence repair needs
- Information on illegal occupation, rubbish dumping and illegal advertisements

a) Environmental assessment

The Employer anticipates that the appropriate environmental authorization process is a basic assessment. From data available assess whether the Employer's expected authorization process is correct, using the services of an environmental specialist who shall confirm the type of environmental approval, (i.e. basic application, or full environmental investigation including all other permits and authorizations) that must be applied for from the relevant Authorities. In addition, the Service Provider; will also assist in identifying the content for an independent Environmental Assessment Practitioner's (EAP) sub-service tender document.

The visit should include an inspection of all borrow pits identified during the detailed assessment and act on any other relevant information emanating from the hand-over meeting discussions. Where any borrow pit or quarry is in any way affected by an informal settlement, the information gathered must immediately be brought to the attention of the Employer.

C3.2.5 Structures

The Service Provider shall draw up a list of all structures and conduct safety inspections at least once in 12 (twelve) months in terms of the Construction Regulations. Safety inspections for newly constructed structures

must be conducted every 6 (six) months for the first 2 (two) years. The format of the safety inspection is provided in Part C4: Appendix F. The following structures must be inspected:

- Bridges
- Major culverts
- Other culverts
- High mast lights and mast over 10m high
- Walls over 2m high
- Gantries
- Tunnels
- Buildings

Safety inspection records must be submitted to the Employer in the prescribed format at least once in 12 (twelve) months or every 6 (six) months for the first 2 (two) years for newly constructed structures. Uploading of this information into ITIS will be required once the module is functional in ITIS/ITIS Mobile.

Waterway inspection on all structures crossing a waterway must be carried out at least once in 12 (twelve) months or after any significant storm event. The waterway inspection form is also provided in Part C4: Appendix F.

C3.2.6 Occupational Health and Safety obligations

Notwithstanding that this scope of works prescribes various procedures in terms of health and safety requirements the Service Provider cannot rely on these as the sole source of his obligations in terms of the Occupational Health and Safety Act (Act 85 of 1993) and accompanying Regulations. Nothing herein shall absolve the Service Provider from conforming to all the requirements of the said Act and Regulations and in the event of conflict between the provisions of this scope of works and the statutory provisions, the latter shall prevail.

C3.2.7 Market Analysis and Databases

The Service Provider shall undertake a market analysis in terms of the CIDB guidelines for undertaking a feasibility study (CIDB grading, Central Supplier Database (CSD), etc.) of availability and type of Targeted Enterprises for the Works Contract. The Service Provider shall further set up databases for Targeted Enterprises and Targeted Labour, assist local Targeted Enterprises to register on the CSD and maintain and update these databases on a monthly basis. Provision for this service has been made under C3.6: Additional Duties.

C3.2.8 Investigations, Sampling and Testing

Intrusive investigations are deemed to be any type of investigation that probes into or removes from the pavement layers, sub-grades, structures' elements and other areas, e.g. cuttings, etc.

Supervision of intrusive investigations shall not be delegated, they shall be supervised and logged by the key person listed as the relevant design specialist.

Provision for investigations, sampling and testing has been allowed for in the Pricing Schedule.

The Service Provider shall submit for approval a schedule of proposed work for all field work, sampling and testing prior to commencement.

With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS to determine the number and locality of testing required. The data will need to be uploaded into the SARDS portal by Service Provider as per the defined standard format.

C3.2.9 Materials Investigation and Testing

a) Test pits

All test pits shall be excavated, profiled and sampled in accordance with the M1 Manual and industry best practice. The dimensions of the excavation shall be sufficient to permit safe working conditions and to allow

for adequate quantities of material to be sampled from each horizon for the envisaged testing. All test pits shall be excavated to a minimum depth of 800mm, or deeper if so specified by the design engineer.

All test pits shall be backfilled utilizing material which is at least of a similar quality as that removed from the relevant horizon. The upper 150mm horizon shall consist of at least G2 quality material stabilized with 2% emulsion and 1% cement. The surfacing shall consist of hot/cold asphalt or prefabricated seal patches as appropriate to the existing surfacing and traffic/road class. Compaction shall be by appropriate compaction equipment in layers not exceeding 150mm.

With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS to determine the number and locality of testing required. The data will need to be uploaded into the SARDS portal by Service Provider as per the defined standard format or SARDS interface.

b) Dynamic Cone Penetration (DCP) testing

Dynamic Cone Penetration (DCP) testing shall be carried out in accordance with the standard test method. Appropriate drilling equipment shall be utilized to penetrate asphalt, highly stabilized or cemented layers prior to proceeding with the testing. Results of DCP testing shall be produced in a format enabling full assessment of the various pavement layers to be assessed.

With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS to determine the number and locality of testing required. The data will need to be uploaded into the SARDS portal by Service Provider as per the defined standard format or SARDS interface.

c) Transport of samples to laboratory

All samples shall be securely fastened, labelled and transported to the laboratory appointed to carry out the required testing. Distinction has been made in the Pricing Schedule between large bags and small bags/cores.

With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS to determine the number and locality of testing required. The data will need to be uploaded into the SARDS portal by Service Provider as per the defined standard format or SARDS interface.

d) Laboratory testing

Only SANAS accredited laboratories shall be permitted to carry out laboratory testing of materials. All testing shall be carried out in accordance with the methods specified in the relevant test methods.

Provision for the costs of any laboratory testing has been included under specific tests and/or under a Provisional Sum item in the Pricing Schedule.

With the release of the SARDS, the Service Provider will be required to follow the standard workflow within SARDS to determine the number and locality of testing required. The data will need to be uploaded into the SARDS portal by Service Provider as per the defined standard format or SARDS interface.

C3.2.10 Measurement and payment

Item		Unit
32.01	**Detailed assessment phase**	
	(a) Road Condition Report	lump sum (LS)
	(b) Travel and subsistence costs	lump sum (LS)
	(c) Toll fees	prime cost sum (PC)

The unit of measurement for pay item 32.01(a) shall be the lump sum. The sum tendered shall include full compensation for personnel, materials, printing and all other costs for the following:

i) Analysis of available information pertaining to the project.
ii) Detailed visual condition survey, including drawing up a list of structures as specified in Clause C3.2.5.

iii) Compilation and submission of the Road Condition Report as specified.

The unit of measurement for pay item 32.01(b) shall be the lump sum. The sum tendered shall include full compensation for all travel and subsistence associated with the detailed assessment phase.

The prime cost sum is to cover the cost of toll fess for staff performing their duties. Payment will only be made for E-tag transactions upon proof of an official statement via the Employer's Transaction Clearing House (TCH), which is the integrated fee collection and information management process for Electronic Toll Collection (ETC) accounts.

Payment for the lump sum tendered will be made on submission of the road condition report.

Item		Unit
32.02	**Occupational Health and Safety requirements**	lump sum (LS)

The unit of measurement under payment item 32.02 shall be the lump sum. The sum tendered shall include for all costs associated with compliance to the Construction Regulations of the Occupational Health and Safety Act (No 85 of 1993) as relevant for the design and documentation of the Works Contract.

Item			Unit
32.03	**Environmental Services**		
	(a)	Environmental services during design stage	prime cost (PC)
	(b)	Cost for procuring and managing sub-Service Provider under sub-item 32.03(a)Service Provider	lump sum (LS)

The unit of measurement for sub-item 32.03(b) shall be the lump sum.

The cost under sub-item 32.03(b) shall include for the detailed assessment as specified in Clause C3.2.4(a) as well as all costs associated with the planning, scheduling, compilation of quotation/tender documentation, issuing of up to 20 (twenty) quotation/tender documents in electronic format and evaluation for the procurement and management of the sub-service including administrative cost, handling fees and profit.

The Prime Cost item shall be paid in accordance with Clause C2.1.8.

Consumer Price Index shall be applicable to sub-items 3.3.3(b) in accordance with Clause C2.1.6.

Item			Unit
32.04	**Pavement Investigation and Sampling**		
	(a)	Establishment of personnel and equipment for test pitting	lump sum (LS)
	(b)	Hire and operation of excavator	Prime Cost
	(c)	Handling cost for item 32.04(b)	%
	(d)	Test pit excavation by hand	number
	(e)	Sampling and profiling of test pits	number
	(f)	DCP	number
	(g)	Transport of samples to laboratory: (i) Large bags	number

(ii) Small bags/cores number

The unit of measurement under pay item 32.04(a) shall be the lump sum. The lump sum tendered shall cover all costs associated in establishing an appropriately sized team on site to carry out the scheduled test pit programme.

The rate tendered shall be fixed irrespective of the final number of test pits excavated.

The prime cost sum is to cover the establishment, operation and de-establishment of sub-item 32.04(b).

The tendered percentage is a percentage of the amount actually spent under this prime cost sum, which shall include full compensation for the handling costs of the Service Provider.

The unit of measurement under pay item 32.04(d) and (e) shall be the number of test pits excavated, sampled and profiled/photographed by the relevant Design Specialist. With the release of the SARDS, the Service Provider will be required to follow the Standard workflow within SARDS to determine the number and locality of testing required. The data shall be uploaded into the SARDS portal by the Service Provider as per the defined standard format or SARDS interface.

The rate tendered shall include for the safeguarding of the test pits whilst open, all costs including travel, labour, accommodation, subsistence, plant, materials, sample bags, etc. associated with the excavation, profiling and sampling of test pits and subsequent backfilling and compaction thereof as specified.

The unit of measurement under pay item 32.04(f) shall be the number of DCP tests at locations identified by the relevant Design Specialist. With the release of the SARDS, the Service Provider will be required to follow the Standard workflow within SARDS to determine the number and locality of testing required. The data shall be uploaded into the SARDS portal by the Service Provider as per the defined standard format or SARDS interface.

The rate tendered shall include for drilling through any “refusal” layers, completing the test and submission of the DCP analysis to the relevant Design Specialist.

The unit of measurement under pay item 32.04(g) shall be the number of large bags and/or small bags/cores transported.

The rates tendered shall include for all costs to transport the bags/cores to the laboratory selected to carry out the testing, irrespective of distance.

Consumer Price Index shall be applicable in accordance with Clause C2.1.6.

C3.3 TENDER DOCUMENTATION

C3.3.1 Scope

This section covers the requirements and process for the compilation of tender documentation and invitation to tender for the Works Contract. The Service Provider may be requested to compile the tender document either at the beginning of the contract (for the Works contract to be administered by the Service Provider), or at the end of the contract for the Works contract to be administered by another Service Provider.)

C3.3.2 Standards

The tender documentation for the Works Contract shall be compiled in accordance with the following:

- Conditions of Contract for Construction: FIDIC; 1999.
- Standard Specifications for Routine Road Maintenance, April 2019.
- The Employer's pro-forma tender document.

The style, format and presentation of the tender documents shall be in accordance with the requirements listed in the Employer's pro-forma document.

C3.3.3 Tender Documentation

The following documents shall form the Tender Documents for the Works Contract:

i) **VOLUME 1:** The FIDIC Conditions of Contract for Construction, 1999 issued by the International Federation of Consulting Engineers (to be purchased separately by tenderers).
ii) **VOLUME 2:** The Standard Specification for Routine Road Maintenance, April 2019 issued by the Employer (can be made available by the Employer in .pdf format).
iii) **VOLUME 3:** The Project Document, which includes Conditions of Tender, Particular Conditions of Contract, Scope of Works and Forms, all in accordance with the Employer's standard pro forma document.
iv) **VOLUME 4:** The Standard Drawings for tender purposes available from the Employer.

The Employer has standard specifications for a Routine Road Maintenance contract. The document comprises a hybrid of specifications, which are based on either a schedule of quantities or are performance based. The Contractor shall be responsible for the overall contract, with 50% of the contract amount being undertaken by Targeted Enterprises (unless otherwise stated in the Contractor's tender document). A Project Management Team (PMT) will be formed which will consist of the Employer, Engineer and Contractor. The function of the PMT will be to make decisions regarding the management of the sub-contracts involving Targeted Enterprises. This will include the scope and extent of work, and the number of sub-contracts to let. The PMT shall work together as a team to compile the sub-contract agreements conforming to the pro forma sub-contract tender document. However, it remains the Consulting Engineer's responsibility to ensure that the documents are compiled.

C3.3.4 Submission procedure

The service provider shall adhere to the following process:

i) Compile and submit two copies of a draft Volume 3 (Project Document) in accordance with the Employer's standard pro-forma document as well as two draft copies of Volume 4 for the purpose of discussion with and acceptance by the Employer.
ii) Attendance at meetings with the Employer for the purposes of discussion and finalisation of the tender documentation.
iii) Subsequent to discussion of the draft documentation, the service provider shall compile the final documents incorporating all the amendments arising there from and deliver the requisite number of complete sets in electronic format to the Employer's regional office on or before the date specified in clause C3.1.7.

In the event where draft documentation is of sub-standard/poor quality, the above-mentioned process will be repeated. In such circumstances the additional time spent by the Employer shall be paid for by the Service Provider as specified in Clause C3.6.3.

C3.3.5 Tender Advertisement

The Employer will prepare and submit the tender advertisement to the relevant organisations.

C3.3.6 Measurement and payment

Item		Unit
33.01	**Tender documentation**	
	(a) Preparation of Tender Documents	lump sum (LS)
	(b) Tender Documents in electronic format	number

The unit of measurement for pay item 33.01(a) shall be the lump sum. The sum tendered shall include for the compilation of two (2) full sets of draft tender documents (comprising Volumes 3 and 4, as relevant) for discussion with the Employer. Payment of the lump sum tendered shall be due on receipt, by the Employer, of the draft tender documents. The Service Provider may be requested to compile the tender document at the beginning of the contract (for the Works contract to be administered by the Service Provider), or at the end of the contract for the Works contract to be administered by another Service Provider.

The rate tendered under payment item 33.01(b) shall include for all costs associated with the compilation of each full set of final Tender Documents and shall include for all expenditure on labour and materials, communication, postage and packaging incurred by the service provider in the production of the documents (including drawings and plans) in accordance with clause C3.3.3. Delivery of the documents in electronic format shall be on or before the date specified in clause C3.1.7.

C3.4 CLARIFICATION MEETING, TENDER PERIOD AND TENDER EVALUATION

C3.4.1 Scope

This section covers the requirements and process for the Contractors' clarification meeting, tender period and participation in the evaluation of tenders received for the Works Contract.

C3.4.2 Clarification meeting (on-line)

The Service Provider shall prepare a tender presentation of the scope of the works for a clarification meeting, and submit to the Employer's Procurement Office for uploading onto the Employer's website, for prospective tenderers for the Works Contract in accordance with the Employer's standard requirements, which shall, inter alia, include the following:

i) Presenting an agenda for the meeting.
ii) Introduction of the team, including the Employer's Project Manager and Procurement Officer, the Service Provider's personnel, other Stakeholders, if any (for example, Provisional Government Officials, members of the PLC and the PLO).
iii) Describing the Conditions of Tender and Tender Data.
iv) Describing the Conditions of Contract and Contract Data.
v) Describing the Works with as much detail as is required for specific items or operations.
vi) Describing important aspects of the project, e.g. limits of the Contract, etc. to provide a holistic overview.
vii) Announce any amendments made to the tender documents.
viii) Providing an Employer's email address for submission of any clarification questions.
ix) The estimate for the cost of the Works shall not be divulged.

C3.4.3 Tender period

The Service Provider shall in all cases only through the Employer communicate with all tenderers during the tender period in accordance with Conditions of Tender for the works contract. The actions below need to be followed:

- Compiling for distributing by the Employer minutes of the clarification briefing as an addendum at least 10 (ten) working days before the date and time of tender closure.
- Attending to any technical queries or points of clarification requested by tenderers by providing questions and answers to the Employer for distribution as part of any addenda.
- Compilation, distribution and confirmation of receipt by all tenderers of any addenda to the Tender Document.
- Informing and obtaining approval from the Employer of any unresolved enquiries, potential alternative proposals of which notice has been received from tenderers and changes to date for submission of tenders.

C3.4.4 Tender opening and tender evaluation

The Service Provider shall be invited to the opening of tenders for the Works Contract that shall take place via live streaming. The Employer will conduct the compliance of all tender responses and identify all responsive tenders. The Employer will issue copies of the responsive tenders electronically to the Service Provide, including the Compliance evaluation report.

The Service Provider shall evaluate all responsive tenders received from the Employer and compile a consolidated Tender Evaluation Report for submission to the Employer. During tender evaluation, the Service Provider shall:

- Conduct the technical and financial analysis and risk assessment.
- Advise tenderers in terms of Conditions of Tender through the Employer of any arithmetical, or other corrections made to errors in the extension of rates and/or totals in their tenders and the effect of such corrections, and receive written acceptance of such corrections.
- Identify imbalanced rates and request acceptable explanations and/or adjustments thereof in terms of Conditions of Tender through the Employer, which shall be taken into account in the tender evaluation process.
- Making available to the Employer (SANRAL Head Office) 1 (one) electronic copy of the Pricing Schedule of the lowest 2 (two) responsive tenders.

The Service Provider shall, during the tender evaluation, liaise closely with the Employer with respect to any possible disqualification of tenders or issues of a substantive nature identified prior to submission of the Tender Evaluation Report.

The Tender Evaluation Report shall conform to the requirements of the Employer's pro forma document with respect to content and format. One (1) electronic copy of the tender Evaluation Report shall be submitted to the Employer on or before the date specified in clause C3.1.7. **It is important to note that the evaluation of tenders and the compilation of a tender Evaluation Report will be on a similar SANRAL project from another Service Provider, in the case where the Service Provider compiled the tender documents for the Works Contract.**

C3.4.5 Alternative Tenders

The tenderers for the Works Contract are discouraged to submit alternative tenders.

C3.4.6 Contract Documents for the Works

The Service Provider shall, within 14 (fourteen) days of the award of the letter of acceptance, prepare and courier two (2) sets of contract documents for signature. These documents shall be prepared in accordance with the requirements listed in the Employer's Pro-Forma document. One (1) electronic copy in PDF format of a fully signed (by all parties) contract shall also be submitted. The number of additional sets of contract documents for use by the Engineer and his site staff shall be at the discretion of the service provider.

The following shall be bound at the back of Volume 3, or bound together as a separate volume together with a table of contents:

(i) All addenda issued, together with proof of receipt, completed and signed by the successful tenderer.
(ii) All letters, statements and documents submitted by the successful tenderer with his tender
(iii) All correspondence between the Service Provider and the successful tenderer prior to tender acceptance.
(iv) The Employer's letter of acceptance of tender.
(v) The Contractor's letter of acceptance, including any conditions.

The contract documents shall comprise all the documents mentioned above, together with Volumes 1 and 2 and the performance guarantee, which shall remain separate documents.

The Engineer shall assess the performance guarantee provided by the Contractor for conformance with the pro forma wording in the tender documentation and if satisfied, shall thereafter submit it to the Employer for safe keeping.

C3.4.7 Measurement and payment

Item		Unit
34.01	**Clarification meeting and tender period**	
	(a) Service Provider's costs	lump sum (LS)
	(b) Provision for venue and bus	prime cost sum (PC)
	(c) Handling costs in respect of items 34.01(b)	percentage (%)

The lump sum tendered under this pay item shall include for all costs (excluding those for which a Prime Cost Sum has been provided) incurred by the Service Provider with respect to its obligations for site inspection and tender period as specified in clauses C3.4.2 and C3.4.3.

The Prime Cost Sum item shall be paid for in accordance with clause C2.1.8.

The tendered percentage is a percentage of the amount actually spent under this prime cost sum, which shall include full compensation for the handling costs of the Service Provider.

Item		Unit
34.02	**Tender evaluation**	
	(a) Tender Evaluation and Report	lump sum (LS)
	(b) Disbursements	lump sum (LS)

The unit of measurement for pay item 34.02(a) shall be the lump sum.

The lump sum shall include full compensation for time related costs associated with the evaluation of the tender and compilation of tender report. **It is important to note that the evaluation of tenders and the compilation of a tender Evaluation Report will be on a similar SANRAL project from another Service Provider, in the case where the Service Provider compiled the tender documents for the Works Contract.**

The unit of measurement for pay item 34.02(b) shall be the lump sum.

The lump sum tendered shall include full compensation for time related costs to familiarise the Service Provider with the specification and estimated quantities for a similar project from another Service Provider and for all disbursements, materials, printing and all other costs associated with the evaluation of the tender and compilation of tender report and the submission to SANRAL Head Office (W Lategan) 1 (one) electronic copy of the Pricing Schedule of the lowest 2 (two) responsive tenders.

The Provisional Sum item shall be paid for in accordance with clause C2.1.8.

Item		Unit
34.03	**Preparation of Works contract documents**	lump sum (LS)

The lump sum tendered under this pay item shall be for the preparation of two (2) Contract Documents for signature by the Employer and the appointed Contractor for the Works in accordance with clause C3.4.6 and four (4) additional sets for use by the Employer (1), Contractor (1) and engineer (2) and provide an electronic copy of the signed Contract Documents on a flash drive. The sum tendered shall include for all expenditure on labour, materials, communication, postage and packing incurred by the Service Provider in the production and delivery of the documents. Payment of the lump sum will be made on receipt of two (2) copies for signature and four (4) additional of the Contract Documents and an electronic copy of the signed Contract Documents on a flash drive, as specified, by the Employer. The cost of producing any additional copies for use by the Service Provider shall be deemed to be included in the lump sum tendered for this item.

C3.5 ADMINISTRATION AND MONITORING OF THE WORKS CONTRACT

C3.5.1 Scope

This section covers the duties and obligations of the Service Provider in the provision of the Engineer and site supervisory staff for the administration, construction monitoring and measurement of the Works carried out by the Contractor appointed by the Employer.

C3.5.2 Standards

The Service provider shall administer and monitor the Works Contract in accordance with the following requirements and guidelines:

- Government legislation.
- The Contract Documents as issued for the Works Contract.
- The Employer's manuals of procedures and guidelines.
- Current industry good practice.

C3.5.3 Administration and Monitoring

(a) Fulfilling the functions of the Contract Engineer and Assistant Contract Engineer (if applicable)

The appointed Engineer for the project shall be that person listed in the tender, who shall be authorized by the Service Provider to carry out the work intended by the specifications and the duties required by the FIDIC general conditions of contract. Any alternative person to that offered in the tender shall possess similar competencies and experience and shall only be approved by the Employer if such alternative offer is as a result of genuine unforeseen circumstances. The Contract Engineer (CE) shall be a permanent staff member of the tenderer. The Assistant Contract Engineer (ACE) shall be a permanent staff member of the Targeted Enterprise subcontractor.

Towards the latter part of the Administration and Monitoring phase, the Assistant Contract Engineer (ACE) (if applicable), shall be afforded the opportunity to act as Contract Engineer (CE) in order to gain experience in this position, to assist in qualifying in this position in future contracts.

The duties of the Engineer shall be in accordance with the Employer's standard requirements and shall, *inter alia*, include:

i) Conduct meetings with affected communities and relevant forums, if necessary, to establish communication channels and to determine issues impacting on the construction phase.
ii) Appointment of suitable, able and competent site staff, together with the administration of such staff (including those of any independent service provider/s as approved).
iii) Arranging and attending monthly site and technical meetings and keeping minutes of such meetings.
iv) Making arrangements on behalf of the Employer for the provision and reproduction of such drawings and documents as may be required by the contractor and site staff for the execution of the works.
v) Fulfilling all functions and obligations stated or implied for the Engineer, and delegated to the Engineer's Representative, in the Employer's Particular Conditions of Contract, Standard Specifications or Scope of Works or any other document applicable to the control and administration of a works contract.
vi) Issuing instructions to the Contractor, coordinating and generally inspecting the execution of the Works for compliance with the contract at such intervals as appropriate for the purpose of the proper inspection of the works, directing site staff and delegating the detailed and day-to-day supervision/inspection of the works and site administration.
vii) Advising the Employer regarding the inspection and testing of such materials and plant as are usually inspected and tested and arranging for such inspection and testing to be carried out in accordance with current appropriate codes, manuals and guidelines.
viii) Arranging for the carrying out of performance or acceptance tests and surveys as required by the Employer.
ix) Approve all materials and or surfacing designs as may be required.
x) Actively manage, report and assisting the Contractor on training, development and empowerment programmes committed to by the Contractor in relation to his tendered Contract Participation Goals. Monitor and report monthly on training, empowerment, capacity building, development of Targeted Enterprises, labour and staff returns, and any such aspects on the Employer's Project Information Module. Separate allowance for payment for this duty has been made in the Pricing Schedule.
xi) Monitor and report on conformance to all relevant Environmental legislation and requirements.

xii) Monitor and report on conformance to all relevant Occupational Health and Safety legislation including regular internal audits to be conducted by the Service Provider's nominated specialist, arrangement for visits by the designer at identified critical phases of construction and recording/reporting of Section 24 incidents.

xiii) Checking and controlling of quantities measured and agreed by the Contractor and the site supervisory staff and settling any disputes that may arise in this regard.

xiv) Issuing certificates electronically to the Employer for payment to the Contractor in accordance with the conditions of contract.

xv) Review and analyse claims and/or disputes or differences that may arise between the Employer and Contractor. Present to the Employer the Engineer's ruling on a claim and/or dispute. All duties with regard to claims and/or disputes will be paid for under Additional Duties.

xvi) Issuing Works Authorisations, as agreed with and approved by the Employer.

xvii) Provide the Employer with progress and other reports on all aspects of material importance regarding the Works.

xviii) Identification of risks to the Employer under the Works Contract, as well as communicating mitigation measures to the Employer.

xix) Provide the Employer within 3 months of issuing the Taking-over Certificate of the works with such draft construction reports, materials as-built records, as-built plans and all other documents normally associated with contract administration. The final reports/records shall be provided within 1 month of the issue of the Performance Certificate for the Works contract.

xx) Certain construction monitoring duties may be delegated to a Route Manager.

xxi) Frequent inspection of the site shall be made so that problems may be identified, the causes identified, the methods of repair stipulated, job instructions issued and the repairs carried out timeously. It shall include night inspections of the road signs, road markings and road lighting, and inspections of the drainage during adverse weather conditions. Records of safety inspection of structures (refer Appendix F) must be kept and submitted to the Employer annually.

The following <u>minimum</u> inspection frequencies shall be used in developing a supervision methodology:

Update management report	bi-annually
Update condition report	weekly
Road traffic signs	annually
Road marking	annually
Road lighting	weekly
Guardrails	weekly
Structures	annually
Flexible road condition	annually
Rigid road condition	annually
Drainage	monthly
Slope Instabilities and applicable recommendations	(refer to Appendix C in Part C4)
Informal settlements	weekly
Illegal accesses and signage	weekly
Fencing	monthly
Additional SANRAL properties	monthly
Night-time inspections	quarterly
Electrical infrastructure	monthly
RRM Road Safety Investigation	bi-annually

xxii) Site Management System:
Compliance with the requirements of the Employer's Site Management System.

xxiii) Assisting the Contractor with compilation of the sub-contract tender documents. Attending sub-contractor's tenderers meetings, keeping minutes of such meetings and correspond with interested and affected parties as and when required. Assisting the Contractor regarding Targeted Enterprises tender process and evaluation thereof.

xxiv) Supervise, coordinate and certify as correct the timeous completion of the Road Safety Engineering Assessments of the entire length of the contract.

xxv) Coordinate the identification of hazardous locations.

xxvi) Conducting interim monthly performance evaluations on the Contractor and a final written and signed report to be submitted to the CIDB as gazetted.

xxvii) Training Assistant Contract Engineer (if applicable).

(b) Head office administration

The Service Provider shall supply sufficient head office administrative support to the site personnel to ensure efficient and timeous administration of the Works Contract.

The Service Provider shall furthermore be responsible for the safe keeping of all original documentation related to the different phases of the project, for a period of at least 5 (five) years after the defects notification period. No additional payment will be made for this.

(c) Occupational Health and Safety obligations

The Service Provider shall execute the duties delegated to it in writing as the Client's agent under regulations 5(5), 5(6) and 5(7) of the Construction Regulations, 2014, and shall comply with the designer duties in regulation 6 where applicable.

The Service Provider shall arrange, formally and in writing, for the Works Contractor to provide documentary evidence of compliance with all the requirements of the said Act. The Service Provider shall also carry out regular site audits to ensure compliance thereto. Should the Service Provider not have "in-house" capacity to undertake such duties, an external recognized specialist shall be appointed. This individual needs to be registered with the SACPCMP as a Professional Construction Health and Safety Agent or a Construction Health and Safety Manager. Provision for payment for all OHS obligations during the construction phase has been included in the Pricing Schedule.

(d) Monthly Technical and Site Meetings

The appointed Engineer and Assistant Contract Engineer for the project shall visit the site at least two (2) times per month, excluding the Contractor's annual shutdown period in December and January, on separate occasions. One visit shall be scheduled for the Technical Meeting with a thorough site inspection with the Contractor and the Engineer's representative. A second visit shall be scheduled for the monthly Site Meeting with a thorough site inspection with the Contractor and the Employer's representative. The Contract Engineer shall provide a one-page summary of each visit with dated photographic and location evidence. Failure to provide the summary report may result in a penalty in accordance with Contract Data clause 3.11.1.

(e) Assistance at Clarification Meeting, Tender Period and Tender Evaluation of sub-contract packages

The Service Provider shall be required to assist the contractor with regards to the procurement of sub-contractors to comply with Part D of the Construction Contract. The specifications for the clarification meetings, tender period and tender evaluation of sub-contract packages shall be similar to those in Clauses C3.4.2, C3.4.3 and C3.4.4.

Allowance has been made for these requirements in the Pricing Schedule under Additional Duties.

C3.5.4 Establishment of supervisory personnel on site

(a) Supervisory team

The Service Provider shall be required to provide a team on site to monitor, administer and measure the Works in accordance with the requirements of the Works Contract, Employer's standard requirements and industry good practice.

Provision has been made in the Pricing Schedule for the envisaged staffing requirement. The establishment of such staff shall however be subject to the approval of the Employer. For the envisaged scope of the Works, the supervisory team will consist of the following:

i) Route Manager
ii) Assistant Route Manager (x2)
iii) Project Liaison Officer
iv) Trainee (student)

The minimum requirements for qualification and experience of the supervisory team are specified in Clause C3.1.10.

Provision has been made in the Pricing Schedule to cover the total annual cost of employment (TACE) of the supervisory staff which shall include the following:

i) Basic salary.
ii) Other benefits not reflected in the basic salary, which may include:
- normal annual bonus (maximum of one month's salary) but excluding any performance bonuses or merit bonuses;
- consulting firm's contribution to medical aid;
- group life assurance, accident and disability insurance;
- pension/provident fund contributions by the consulting firm;
- allowances forming part of the remuneration package which are pensionable (car allowances, etc.);
- computer and cell phone allowance if part of package; and
- other justifiable costs and allowances approved by the Employer.

iii) costs payable due to all applicable statutory requirements such as:
- Workmen's compensation fund contributions;
- Unemployment insurance contributions; and
- Other applicable statutory levies.

A standardised site staff overhead factor of 1.2 will be applied to the TACE of the supervisory staff (excluding the trainee (student) and Project Liaison Officer) which is made up as follows:

Description	**Site staff overheads**
Salaries (Technical) TACE	1.00
Telephone and communication	Tendered item
Rental of premises, electricity, water	Provided by Client
Transport not recovered from project	Pay item
Paper, stationary, consumables	Tendered item
Audit, bank charges, interest, insurance	0.08
Marketing	0.02
Office equipment	Tendered item
Training and development	0.02
Project direct expenses not recoverable	0.08
Head Office expenses	Tendered item
Net Overhead Factor before profit	**1.2**

Provision has also been made in the Pricing Schedule for additional overhead costs related to the employment of the relevant personnel, which may include the following:

- overtime by salaried professional and semi-professional staff (qualified Engineers, Technologists and Technicians) and all such other staff for which overtime is not payable in terms of the Labour Act;
- ordinary leave and sick leave (one month);
- administration related to salaries, legislation, etc.; and
- other overhead expenses and profit.

Replacement of staff as a result of any extended period of leave or sick leave outside the normal contractor's year end break shall be to the approval of the Employer.

Three (3) months prior to the commencement of the works contract the Service Provider shall submit for consideration and approval to the Employer a detailed proposal in the Employer's prescribed format which shall include a CV of appropriate experience and qualifications as well as a cost estimate for each required and/or proposed person. In addition, the Service Provider shall also complete Returnable Schedule Forms B1 and B2 for at least the Route Manager (RM) for evaluation. Amongst other evaluation criteria to be used, shall be the individual threshold of **70%**, for each of the above-mentioned site staff.

The annual salaries for those approved staff shall be substantiated by an auditor's certificate at the start of the project and whenever salary or staff changes occur thereafter. Prior approval is required for any salary adjustments/increases.

The Employer shall be entitled to instruct the Service Provider to remove forthwith from the Works any person employed by the Service Provider on or about the execution of the Works who, in the opinion of the Employer, misconducts himself or is incompetent or negligent in the proper performance of his duties, or whose presence on site is otherwise considered by the Employer, on reasonable grounds, to be undesirable.

(b) Relocation of site staff

Provision has been made in the Pricing Schedule for the costs to relocate the core supervisory team to site.

(c) Accommodation

Appropriate housing for the supervisory team will be required to be provided by the Service Provider. A provisional sum has been allowed in the Pricing Schedule for this purpose. Accommodation of the site staff shall be located as near to the Works as practically possible.

The expected accommodation requirements and estimated cost shall be provided with the initial TACE calculation and shall form part of the site personnel evaluation.

Where site staff elect to occupy their own housing and approved by Employer, payment will be made in accordance with the table below.

Table C3.5.4: Monthly accommodation allowance rates (June 2025)

ANNUAL BASIC SALARY	AREA IN WHICH HOUSING UNIT IS LOCATED	
	OTHER	METROPOLITAN AREAS
Up to – R160 000	R 4,429 00	R 5,103 00
R160 000 – R320 000	R 5,612 00	R 6,707 00
R320 000 – R610 000	R 6,879 00	R 8,620 00
R610 000 and over	R 8,217 00	R 9,750 00

NOTE:

- The amounts in this table are fixed for 1 (one) year only (April-March of each year) regardless of the Stage of the Project. The Employer may publish revised amounts on a yearly basis.

(d) Trainee personnel

A Provisional Sum has also been included in the Pricing Schedule to cover the costs of a trainee/student on site. The objective is to afford a locally based university or technikon student/s mainly from the historically disadvantaged group the opportunity to receive experiential training. The appointment of any such trainees, their length of time on site, as well as the monthly allowance to be paid, shall be approved by the Employer. The Service Provider shall, if ordered by the Employer, identify any such local trainees for temporary appointment and implement and monitor appropriate training in accordance with the tertiary institutions requirements.

(e) Establishment of site office

The Employer's preference for the establishment of a Site Office is the town of Delmas

Provision for the erection and maintenance of a site office building and all related services, will be made under the Works Contract. The Service Provider shall however provide sufficient office equipment to perform all required duties for the monitoring of the Works Contract. This shall, inter alia, include the following:

- all cell phones,
- safety equipment in accordance with the OHS requirements, e.g. safety jackets, rotating amber lights, safety boots, etc.
- photo copiers, fax machines, modems, personal computers and printers (including all hardware and software)
- consumables and stationary
- Dynamic Cone Penetrometer

One (1) landline, including rental, call and data costs for work related office and fax usage shall be provided through the Works Contract. Should fixed connectivity not be available mobile connectivity with data shall be provided through the Works Contract.

Provision has been made in the Pricing Schedule for supplying the equipment as well as the monthly operational costs thereof.

In addition, the Route Manager and his assistant shall be equipped with mobile phones for the Employer's ITIS mobile application, with the following **minimum** specification:

- Operating system: Android 6 or higher
- Camera resolution: 5 Mega pixels or greater – 8MP recommended
- Screen resolution: 480x800 pixels or greater
- GPS facility with: Yes - Geo Tagging for images
- Data connection: 3G or greater

C3.5.5 Monitoring of the Works Contract

The Service Provider shall ensure that all the work required under the Works Contract is carried out in accordance with the specifications and current best practice and shall include effective financial control. Construction monitoring shall be carried out in a pro-active manner and in accordance with the Employer's standard requirements and current best practice.

The Service Provider shall be responsible for the normal duties associated with the management and supervision of a Works contract, which duties shall, *inter alia*, include:

- Monitoring and reporting of the Contractor's programme.
- Implement Engineer's quality control plan.
- Monitor Contractor's quality control plan.
- Site audits, inspection, quality control testing, approval, rejection of work.
- Measurement and certification of completed work inclusive of cash flow forecasts.
- Management of ITIS software, issuing of job instructions using ITIS/ITIS Mobile, capturing of contract related data and any other associated duty relating to the ITIS modules as described under C3.1.13.
- Regular Site and technical Meetings with Contractor and Employer.
- Monitoring of the Contractor's third party claims.
- Monitoring and reporting of Contractor's CPG commitments.
- Supervision of traffic accommodation arrangements.
- Attend project liaison committee meetings.
- Monitoring and reporting of the project's EMP and NEMA requirements.
- Implement the Engineers requirements in terms of compliance with the OHS Act.
- Monitor the Contractor's compliance with the OHS Act.
- Compile all reports and as-built data in accordance with the Employer's standard requirements.
- Report on the Service Provider, Contractor and sub-contractors BEE information as required by the Employer.

In addition to duties related to the normal day-to-day activities of the Works, the Site Personnel may be required to assist with the supervision of separate regional road maintenance contracts *inter alia*, road marking and road signs. They shall represent the Employer at community forums and local fire protection associations when instructed. In addition, they shall be responsible for Incident Management System, Road Safety, Statutory Control functions and the Routine Maintenance and Slope Management System (refer to Appendix C in Part C4) as described below:

Emergency preparedness and all-hazards response

The Service Provider shall prepare, submit within thirty (30) days after the hand-over meeting, and thereafter maintain an Emergency Response Plan for the entire Contract Footprint. The plan shall provide a 24-hour duty roster and a single contact point, escalation and communication protocols, incident levels, mobilisation and response times, alternative routes, emergency suppliers and equipment, traffic-accommodation arrangements, environmental and hazardous-material controls, and integration with the applicable Road Incident Management System and disaster-management structures.

Emergency Events include, without limitation, road crashes, fire, hazardous-substance spills, flooding, wash-aways, sinkholes, slope or rockfall events, bridge or culvert damage, severe weather or snow, road obstructions, vandalism or damage to essential road infrastructure, civil unrest or security incidents, utility failure and any event that threatens life, property, the environment, road safety or network continuity.

On notification of an Emergency Event, the Service Provider shall immediately acknowledge and verify the event; notify and coordinate with the Employer, Contractor, RIMS, disaster management, traffic authorities, SAPS, fire and emergency medical services, environmental or water authorities and other relevant responders; protect road users through traffic accommodation and road-closure or diversion measures; and issue urgent Job Instructions or prepare Works Authorisations within the authority delegated by the Employer. The Service Provider shall support, and shall not displace, the statutory incident commander or emergency-service authority.

The Service Provider shall maintain a contemporaneous incident log with time-stamped photographs, coordinates, communications, decisions, instructions, resource and cost records, environmental notifications, third-party recovery information and ITIS updates. For a prolonged event it shall issue situation reports at intervals directed by the Employer, and it shall submit a close-out and post-incident report within five (5) working days after stand-down unless another period is instructed.

Alternative routes, emergency contacts and response maps shall be verified at least annually and immediately updated when a Transferred Road is added. The Emergency Response Plan shall be reviewed after every major event and at least annually. Routine standby and readiness are included in the normal monthly duties; major investigations, emergency designs, specialist services or sustained deployment beyond the normal RIMS duties shall be instructed and remunerated under Additional Duties or a variation.

(a) Road Incident Management System (RIMS) Functions

The Employer has appointed a RIMS Coordinator under a separate contract. The contact details of the RIMS Coordinator will be provided at the Handover meeting.

The RIMS Coordinator's primary role in RIMS includes:

(i) Facilitate and manage all RIMS systems in the Mpumalanga Province,
(ii) To facilitate the co-ordination and co-operation of all organisations, agencies and stakeholders involved in IMS,
(iii) Monitor all systems and ensure all activities of RIMS are done,
(iv) Facilitate all the RIMS meetings, from Steering Committee level to Provincial,
(v) Manage the RIMS activities required from the RRM Consultant and ensure execution, and
(vi) Submit various reports on the management and progress of all RIMS systems in the Mpumalanga Province.

The RIMS Coordinator shall provide services relating to the operation and management of the Road Incident Management System in the Province or Region identified by the compiler and across the Contract Footprint.

The project comprises the current SANRAL routes listed in this Scope of Work and any Transferred Road added to the Contract Footprint by written instruction. The compiler shall insert the applicable Province or Region and the verified route length at tender stage, and the Service Provider shall update the route-length reconciliation after every approved network change.

The Services required of the appointed RIMS Consultant comprise of the following distinct phases:

1. To maintain and ensure implementation of the RIMS in compliance with the agreed protocols and objectives.
2. To ensure the effective coordination and management of road incidents in terms of the RIMS procedures and protocols.
3. To ensure adequate training and knowledge of RIMS protocols amongst the emergency services personnel.
4. To annually prepare RIMS Provincial Monitoring Report which provides an update on all RIMS systems in terms of the five pillars, progress achieved based on the NTC scorecard, progress towards identified key regional objectives and also includes high level statistical analysis in the identification high incident/ crash zones and hazardous locations by sourcing information from RRM.
5. To address critical issues impacting on the effective implementation of road incident management and to continuously seek to improve the effectiveness of each system.
6. To create awareness of RIMS protocols and standard operating procedures among Stakeholders and Emergency services.
7. To analyse all incident data on the Employers Integrated Transport Information System (ITIS) and to continuously seek to improve the quality and quantity of incident or crash data reported and captured by RRM by verifying and gathering data from other sources.
8. To assist RRM in the collection of data from Provincial departments on a monthly basis, in order to consolidate and extrapolate the provincial crash data reports from ITIS.

The duties of the Route Manager for RIMS shall include:

(i) Capture Incident Data on the Employer's Incident Capturing Tool on a weekly or monthly basis
(ii) Collection of Incident Data from WhatsApp, AR forms and other sources provided by the RIMS Consultant, to verify data with incidents reported on ITIS.
(iii) Ensure all incidents are reported immediately upon notification live on WhatsApp or SANRAL defined platform, and provide regular updates as the incident progresses, until it is closed and stood down.
(iv) Completion of Fact Sheets/Monthly Reports for Incident Data to be submitted.
(v) Submission of Cost Recovery documents.
(vi) Assisting and attending RIMS Steering Committee and provincial meetings where required.
(vii) Initiating Post Incident Assessments where challenges have been identified.
(viii) Managing the Contractor's RIMS responsibilities.
(ix) Assisting RIMS Consultant in updating the RIMS Guideline Documents.
(x) Assist with arrangement of training workshops as and when required.
(xi) Ensuring the emergency teams receive training in RIMS and Dangerous goods training within the first 4 months of appointment.
(xii) Ensuring the RM receives training in RIMS.
(xiii) Submit Site and Technical Meeting dates for the year ahead to the RIMS office at the beginning of each new year.
(xiv) Submit the RRM Monthly Accumulative/Operations Summary Report for the previous calendar month to the RIMS Coordinator by the 10th of each month.
(xv) Report incident statistics in the Monthly Report, including total number of incidents, total number of fatalities, incidents captured/not captured on ITIS, and AR forms completed/outstanding.
(xvi) Report hazardous locations in the Monthly Report, with accurate start and end kilometre positions and a proper description of the hazardous location.
(xvii) Report cell phone dead zones within the district, including coordinates and the network service provider.
(xviii) Collect accident report (AR) forms from SAPS on a monthly basis and forward all incomplete AR forms to the RIMS office for assistance (completion of AR forms remains the responsibility of SAPS).
(xix) Report all roadworks and road closures on the district WhatsApp group or SANRAL defined platform.
(xx) Report theft of, or vandalism to, national road infrastructure to SAPS (essential infrastructure-related offences) and notify the relevant services of stationary or abandoned vehicles requiring removal.
(xxi) Maintain a serviceable and readily deployable emergency-response trailer, or approved equivalent, for initial incident support and road clearance, with trained personnel and equipment appropriate to the risk profile, including traffic-control devices, advance warning signs, lighting and power, communications, spill-control materials, fire extinguishers, first-aid equipment and hand tools. Equipment shall be inspected monthly and after each deployment, and records shall be available for audit.

The RIMS functions and areas of responsibility of the RIMS Coordinator and the Route Manager are listed in Part C4, Appendix B.

(b) Road Safety

The Employer has implemented a Road Safety Management System (RSMS) which proactively and reactively addresses road safety concerns on the entire national road network. The vision of the Employer Road Safety Strategy reads as follows: "To achieve a sustainably safe national road network for all our road users, primarily through engineering, but also through partnerships with education and enforcement authorities and stakeholders"

Routine Road Maintenance contracts cover the full extent of the national road network and therefore play a pivotal role in realizing this vision. In addition to normal road safety responsibilities and liaising associated with Routine Road Maintenance contracts, the Service Provider is expected to perform the following key activities which are closely aligned with the Employer's RSMS.

(c) Statutory Control Functions

The Service Provider shall monitor and record all approvals granted by the Employer for applications relating to statutory control such as accesses, signs, wayleaves and developments within the building restriction area. In addition, all damage to the road network and road furniture shall be reported on.

The Service Provider shall not have the power to enforce statutory control but shall report any infringements to the Employer without delay and, if so required by the Employer, shall act on his behalf. Some examples are:

- Illegal advertisements
- Illegal trading
- Illegal accesses
- Illegal occupation of road reserve
- Building line transgressions

The Service Provider shall be required to undergo training in respect of statutory control functions. Training shall be undertaken by the Employer at a place and time to be arranged.

(d) Routine Maintenance and Slope Management System

The Site Personnel's role in the Slope Management System shall be to respond to, report and monitor incidents in accordance with the Employer's Routine Maintenance and Slope Management System Guidance Manual (refer to Appendix C in Part 4).

(e) Structures Safety Inspections

The Service Provider shall conduct safety inspections on all listed structures as specified in Clause 3.2.5.

C3.5.6 Project Liaison Officer (PLO)

The PLO is a person who acts as the liaison officer for the PLC and PMT.

The PLO shall facilitate the employment of Targeted Labour and shall coordinate communication between the PMT and the PLC to address the day-to-day project, Stakeholder and community matters that impact on the parties to the project.

The Standard TOR for PLOs requires of the PLO to execute specific duties during each stage of the project, i.e. from project initiation to project completion. Some of these duties overlap project stages and hence, a full description is provided here.

The PLO shall execute the following duties:

i) Except for taking the minutes of PLC meetings, which is a duty of the Engineer or his representative, the PLO shall provide a secretarial function to the PLC which includes, amongst others, the following:
   a. Schedule meetings;

b. Compile meeting agendas;
c. Compile document packages for meetings;
d. Distribute minutes of meetings;
e. Assist PLC to formulate their communication in writing;
f. Distribute written communication to and from the PMT and the PLC;
g. Keep records of all the above and any other PLC documentation; and
h. Provide any other reasonable secretariat function pertaining to the PLC.

ii) Attend all PLC meetings to report on the day-to-day project, Stakeholder and community matters that impact on the parties to the project.
iii) Attend all monthly site meetings to report on the day-to-day project, Stakeholder and community matters that impact on the parties to the project.
iv) Attend any other meetings related to the project and in which any of the project Stakeholders, affected communities, Local/Targeted Labour and Local/Targeted Enterprises are involved.
v) Maintain a full-time presence on site to monitor and address the day-to-day project, Stakeholder and community matters that impact on the parties to the project.
vi) Maintain a full-time presence on site to assist the PMT in the day-to-day liaison with project Stakeholders and affected communities. Typical information to be disseminated by the PLO includes:
a. Basic scope of works and how it will affect the community;
b. Project programme and regular progress opportunities;
c. Anticipated employment and sub-contracting opportunities;
d. Project programme as it pertains to the employment of Targeted Labour and sub-contracting of Targeted Enterprises;
e. Occupational Health and Safety precautions; and
f. Any other information relevant to project Stakeholders and the affected communities.
vii) Be well acquainted with the contractual requirements as it pertains to Targeted Labour employment and training requirements.
viii) Assist the PMT and PLC to establish and agree the eligibility and selection criteria to be followed when employing Targeted Labour.
ix) Assist the PMT in its resources and skills audits by providing a coordinating function between the PMT, project Stakeholders and the affected communities.
x) Ensure that Targeted Labour databases, compiled from the resources and skills audits, are based on the agreed eligibility and selection criteria and that it is updated as and when required.
xi) Coordinate the selection and employment of Targeted Labour based on the agreed eligibility and selection criteria and based on the Contractor's labour requirements.
xii) Ensure that each labourer enters into an employment contract which adheres to current and relevant labour legislation.
xiii) Ensure that each labourer understands the conditions of his/her employment with an emphasis on the employment start date, end date and wages payable.
xiv) Identify and inform the PMT of any relevant training required by the Targeted Labour.
xv) Attend all disciplinary proceedings to ensure that hearings are fair and conducted in accordance to the current and relevant labour legislation.
xvi) Be pro-active in identifying PLC, project Stakeholder, affected communities (including Targeted Labour and/or Targeted Enterprise sub-contractor), requirements, disputes, unrest, strikes, etc. and bring it to the attention of the PMT.
xvii) Assist the PMT to liaise with the PLC, project Stakeholders and the affected communities to resolve any disputes, which occurs due to the project.
xviii) Other than the document records to be kept as mentioned in (i) above, keep record of all other documents and processes pertaining to the employment of Targeted Labour and any other records that may be of relevance to the functions of the PLC.
xix) Produce and submit a monthly report to the PMT and the PLC on PLC meetings, other meetings attended by the PLO, Targeted Labour employment, and project Stakeholder, affected community and any other project matters that impact on the parties to the project.

C3.5.7 Transport for site supervisory staff and additional services

The Service Provider shall provide sufficient appropriate vehicles on site to carry out the duties as specified in clause C3.5.5 and C3.5.6 including materials sampling and testing. Only travel in the execution of these duties, as well as any other travel necessary as a result of any additional duties as ordered by the Employer, shall be claimable. Travel costs incurred as a result of weekend travel by site staff to their place of permanent residence shall not be claimable and shall be deemed to be included in the monthly salary for the relevant site staff. Travel between site staff's residence and Site Office shall be deemed as **private travel**.

Travel log sheets for each vehicle utilised shall be certified by the Engineer and included under cover of the payment certificates submitted to the Employer. The kilometre rate for all in excess of 3000 km per vehicle per calendar month shall be reduced and paid for at 60% of the rate.

The vehicle type for all supervisory staff (including PLO) shall be limited to a Category A and B with a 1800 engine volume cc.

Fuel rates can be downloaded monthly be following the link: https://www.transport.gov.za/web/department-of-transport/roads.

C3.5.8 Measurement and payment

Item		Unit
35.01	**Engineer and Head Office**	
	(a)(i) Cost to fulfil the duties of the Engineer including acting as "Agent" for the Employer in terms of the Construction Regulations to the OHS Act	month
	(ii) Disbursements	month
	(b) Head Office overhead costs	month
	(c) Occupational Health and Safety obligations	
	(i) Continuous compliance and monthly internal audits	month
	(ii) External audits	provisional sum (PS)
	(iii) Handling costs i.r.o. sub-item 35.01(c)(ii)	percentage (%)
	(d) Training of Assistant Contract Engineer	
	(i) Training by Contract Engineer	provisional sum (PS)
	(e) Extra over items 35.01(a), (b) and (c)(i) for additional roads transferred to SANRAL	month

The unit of measurement under pay item 35.01(a)(i) and (ii) shall be the rate per month (pro rata for part of a month). The rate for item 35.01(a)(i) shall include full compensation for all costs, including personnel associated with fulfilling the duties of the Engineer as specified in clauses C3.5.3, C3.5.4 and C3.5.5

The tendered rate for item 35.01(a)(ii) shall include full compensation for the transport, accommodation and subsistence of the Engineer (if required) as well as all related costs, disbursements and profit, associated with fulfilling the duties of the Engineer as specified in clauses C3.5.3, C3.5.4 and C3.5.5.

The unit of measurement under pay item 35.01(b) shall be the rate per calendar month (pro rata for part of a month). The tendered rate shall include for all overhead costs, including levies, taxes, insurances, provision of sureties, profit etc. associated with the engineering services.

The unit of measurement under pay item 35.01(c)(i) shall be the rate per calendar month (pro rata for part of a month). The tendered rate shall include full compensation for all costs, including personnel, transport, accommodation and subsistence of the Occupational Health and Safety Specialist for fulfilling the Service Providers obligations as the Employers agent with respect to the requirements of the Construction Regulations of the Occupational Health and Safety Act (Act No. 85 of 1993).

The services required under 35.01(c)(ii) shall be undertaken by an independent auditor whom the Service Provider shall procure and be approved by the Employer. The provisional sum shall cover all the independent auditor's costs for travel, accommodation and fulfilment of the service (including reports).

The provisional sum shall be paid for in accordance with Clause C2.1.8.

The percentage tendered for handling costs under 35.01(c)(iii) shall include for all costs associated with the planning, scheduling, compilation of quotations, issuing of **3 (three)** quotations in electronic and/or paper format and evaluation for the procurement of the sub-service, as well as handling fees.

The provisional sum for pay item 35.01(d)(i) shall include full compensation for the Service Provider's cost of training the Assistant Contract Engineer as understudy to the Contract Engineer (CE) including for all personnel and other costs, overheads and profit.

The unit of measurement under item 35.01(e) shall be the rate per calendar month, pro rata for part of a month. The tendered rate shall include full compensation for the additional recurring services of the Engineer and head office after a Transferred Road is added to the Contract Footprint, including programme, risk, stakeholder, RIMS, ITIS, reporting and administration updates. Baseline hand-over assessments, investigations, emergency designs and other once-off services shall be measured under the applicable Additional Duties items unless expressly included in the written instruction.

Payment under items 35.01(a) to (d) may be claimed from official hand-over of the Works to the Contractor until issue of the Taking-Over Certificate. Payment under item 35.01(e) may be claimed from the effective date stated in the Employer's written transfer or variation instruction for as long as the additional road remains within the Contract Footprint.

Consumer Price Index shall be applicable in accordance with clause C2.1.6.

Item		Unit
35.02	**Establishment of supervisory personnel on site**	
	(a) Relocation costs of individual site personnel	prime cost (PC)
	(b) Handling costs i.r.o sub item 35.02(a)	percentage (%)
	(c) Establishment of office equipment	lump sum (LS)

The unit of measurement for pay item 35.02(a) shall be the prime cost sum.

Payment under this pay item shall be made for all costs related to establishing the individual supervisory personnel on site and their removal after completion of the Works, as approved by the Employer and shall be paid in accordance with Clause C2.1.6.

The unit of measurement for pay item 35.02(b) shall be the percentage. Payment under this sub item shall be made on the amount actually spent and shall include full compensation for the handling costs of the service provider.

The unit of measurement under pay item 35.02(c) shall be the lump sum. The sum tendered shall be for establishing and de-establishing of all office equipment on site and shall include for all associated costs. Payment shall only be made once all office equipment has been established on site.

Item		Unit
35.03	**Provision of Supervisory Staff and Equipment**	
(a)	Site Supervision Staff	provisional sum (PS)
(b)	Mark-up i.r.o. sub-item 35.03(a)	percentage (%)
(c)	Project Liaison Officer	provisional sum (PS)
(d)	Handling costs i.r.o. sub-item 35.03(c) above	percentage (%)
(e)	Accommodation	provisional sum (PS)
(f)	Mark-up i.r.o. sub-item 35.03(e)	percentage (%)
(g)	Provision and monthly cost of office equipment	month
(h)	Trainee (student)	provisional sum (PS)
(i)	Handling costs i.r.o. sub-item 35.03(h) above	percentage (%)

The sum under pay item 35.03(a) is to cover the monthly (pro rata for part of a month) Total Annual Cost of Employment (TACE) (including a 1.2 site staff overhead factor) of the supervision staff (excluding Project Liaison Officer (PLO) and trainee (student)) as listed in Clause C.3.5.4 and approved by the Employer.

Payment under this pay item shall only be applicable for the period actually established on site and shall in no instance be prior to the date of official hand-over of the Works to the contractor or after 28 days of the date of the Taking-Over Certificate for the Works contract. The TACE shall be verified by means of an audited statement.

The unit of measurement for pay item 35.03(b) shall be the percentage.

The percentage tendered shall include full compensation for all additional overhead costs related to the employment of the relevant personnel as specified in Clause C3.5.4(a).

Consumer Price Index shall be applicable in accordance with Clause C2.1.6.

The provisional sum under pay item 35.03(c) is to cover the costs of a PLO on site as specified in Clause C3.5.6.

The unit of measurement for pay item 35.03(d) shall be the percentage.

The percentage tendered shall include for all costs associated with the sourcing, employment and mentoring of the PLO.

The provisional sum under pay item 35.03(e) is to cover the cost of accommodation for supervisory staff and Trainee (student).

The unit of measurement for pay item 35.03(f) shall be the percentage.

The percentage tendered shall include for all costs associated with the reimbursement by the Service Provider for rented accommodation, as well as handling fees and profit.

The unit of measurement for pay item 35.03(g) shall be the month (pro rata for part of a month).

The rate tendered for office equipment shall include full compensation for supplying and maintaining all office equipment as specified in Clause C3.5.4(e), including all incidentals, all monthly charges and costs such as cellphone and mobile data costs and insurance to operate the equipment.

The provisional and prime cost sum items shall be paid for in accordance with Clause C2.1.8.

Consumer Price Index shall be applicable to sub-item 35.03(g) in accordance with Clause C2.1.6.

The provisional sum under pay item 35.03(h) is to cover the costs of a trainee on site as specified in clause C3.5.4. The provisional sum item shall be paid for in accordance with Clause C2.1.8.

Consumer Price Index shall be applicable in accordance with Clause C2.1.6.

The % tendered for handling costs under pay item 35.03(i) shall include for all costs associated with the sourcing, employment, training, mentoring, scheduling, compilation of reports for the trainee, in order for him/her to complete their studies or to aid them to register with a Professional body, as well as handling fees and profit.

Item		**Unit**
35.04	**Transport for site personnel and additional duties**	
	(a) Travelling to perform duties	provisional sum (PS)
	(b) Handling cost i.r.o. item 36.04(a)	percentage (%)
	(c) Toll fees	prime cost sum (PC)

The provisional sum is to cover the costs for travelling to perform the duties as specified in clause C3.5.7 and any additional duties as may be ordered by the Employer. The rate for transport in excess of 3000 km per vehicle per calendar month shall, however, be reduced and paid for at 60% of the rate. Completed log sheets for each vehicle shall be certified by the Engineer and included in the monthly payment certificate.

The unit of measurement for pay item 35.04(b) shall be percentage.

The % tendered for handling cost under pay item 35.04(b) shall include for all costs associated with providing transport for site personnel, as well as handling fees and profit.

The prime cost sum is to cover the cost of toll fees for site supervisory staff performing their duties. Payment will only be made for E-tag transactions upon proof of an official statement via the Employer's Transaction Clearing House (TCH), which is the integrated fee collection and information management process for Electronic Toll Collection (ETC) accounts.

Item		Unit
35.05	**Assistance at Clarification Meeting, Tender Period and Tender Evaluation of sub-contract packages**	
	(a) Service Provider's cost	number
	(b) Tender Evaluation	number
	(c) Evaluation Report	number

The unit of measurement for sub-item 35.05(a) shall be the number of clarification meetings held. The rate tendered shall include for all cost incurred by the Service Provider with respect to the duties for assisting the contractor at the clarification meeting and tender period as specified.

The unit of measurement for sub-item 35.05(b) shall be the number of sub-contract/work packages evaluated. The rate tendered shall include full compensation for time related costs associated with the evaluation of each sub-contract/work package and the compilation of a Tender Report.

The unit of measurement for sub-item 35.05(c) shall be the number of evaluation reports compiled. The rate tendered shall include full compensation for all disbursements, material, printing and other costs associated with the evaluation and compilation of the Tender Evaluation Reports.

Consumer Price Index shall be applicable in accordance with Clause C2.1.6.

Item		Unit
35.06	**Reporting of Structures Safety Inspections**	number

The unit of measurement shall be the number of annual reporting of structures safety inspections.

The rate tendered shall include full compensation for uploading the safety inspection data of all structures listed in electronic format to ITIS once the software module is functional.

Item		Unit
35.07	**Routine Maintenance and Slope Management System**	
	(a) Incident Response	
	(i) Level 1 Incident	number
	(ii) Level 2 Incident	number
	(iii) Level 3 Incident	number
	(iv) Level 4 Incident	number
	(b) Post-Rain or Seismic Event Inspections	number
	(c) Routine Maintenance Inspections	number
	(d) Continuous Monitoring	number
	(e) Reporting and Recordkeeping Cost	month

Item 35.07 shall be read in conjunction with the Routine Maintenance and Slope Management System Guidance Manual (refer to Appendix C in Part C4).

The unit of measurement for pay item 35.07(a) shall be the number of Emergency Events managed by the Service Provider, classified by the applicable incident level. The rates shall include verification, mobilisation, coordination, traffic-management support, incident logging, ITIS capture, situation reporting, stand-down and the post-incident report. Ordinary 24-hour standby and maintenance of readiness are included in the monthly Engineer and site-personnel duties and shall not be measured again. Major investigations, emergency designs, specialist advice or sustained deployment beyond normal incident-management duties shall be instructed and paid under Additional Duties or a variation.

The unit of measurement for pay item 35.07(b) shall be the number. The rate tendered shall include full compensation for inspecting slopes, ensuring the clearing debris/blockages and ensuring incident sites are made safe after each significant rainfall or seismic event.

The unit of measurement for pay item 35.07(c) shall be the number. The rate tendered shall include full compensation for Routine Maintenance Inspections on all protected slopes, i.e. slopes with shotcrete, mesh drapery coverings, retaining walls etc. Frequency of these inspections shall be carried out at least once a year.

The unit of measurement for pay item 35.07(d) shall be the number. The rate tendered shall include full compensation for continuously monitoring of high-risk slopes, identified by the Geotechnical Service Provider.

The unit of measurement for pay item 35.07(e) shall be the month. The rate tendered shall include full compensation for all disbursements, materials, printing, reporting, recordkeeping and all other associated costs.

All travel and subsistence costs, relating to item 35.07, shall be paid for under item 35.04.

Consumer Price Index shall be applicable in accordance with Clause C2.1.6.

C3.6 ADDITIONAL DUTIES

C3.6.1 Scope

This section covers additional work, special services, specialist advice, reporting and other duties that the Service Provider or the Employer may be required to undertake beyond the normal obligations, including baseline and integration services for Transferred Roads; investigations and designs for emergency repairs after flood, fire, crash, hazardous-spill, wash-away, sinkhole, slope, bridge, culvert, severe-weather, vandalism or security events; and sustained emergency deployment beyond the normal RIMS duties.

It also covers the cost of structured engagement with Community Stakeholders and Project Liaison Committee (PLC) including the development and ongoing maintenance/updating of a Targeted Enterprise and Targeted Labour database.

C3.6.2 Additional Duties

(a) By the Service Provider

The Employer may order duties that fall outside the scope of the project as tendered. Such additional duties may involve, but not be limited to:

- Additional investigations
- Additional design requirements
- Evaluation of alternative tenders
- Diverse other services
- Special Services and specialist advice
- Establishment and liaison with PLC during Design and Construction Phases
- Establishment and maintenance of databases
- Disputes (including disputes between Contractor and Sub-contractors)

Allowance is made in the Pricing Schedule for payment on a time basis for any such additional services that may be required. The level of expertise necessary for any such additional work shall be associated with the issues to be addressed. The category of personnel necessary to undertake the work shall be approved by the Employer in accordance with the following definitions:

i) **Category A** shall mean a top practitioner whose expertise is nationally or internationally recognised and who provides advice at a level of specialisation where such advice is recognised as that of an expert.

ii) **Category B** shall mean a partner, a sole proprietor, a director, or a member who, jointly or severally with his other partners, co-directors, or co-members, bears the risks of business, takes full responsibility for the liabilities of such practice, performs work of a conceptual nature in engineering design and development, provides strategy guidance in planning and executing a project and/or carries responsibility for quality management pertaining to a project (e.g. The Engineer for the project).

iii) **Category C** shall mean all salaried senior professional and technical staff performing work of an engineering nature and who carry the direct technical responsibility for one or more specific activities related to the project. A person referred to in Categories A or B may also fall in this category if such person performs work of an engineering nature at this level (e.g. The Route Manager for the project).

iv) **Category D** shall mean all other salaried technical staff performing work of an engineering nature under the direction and control of any person contemplated in categories A, B or C.

Any additional identified service shall be fully scheduled and submitted to the Employer for approval prior to the commencement therewith.

(b) By the Employer

Additional duties performed by the Employer may involve, but not be limited to:

- re-evaluation of any replacement personnel by the Tender Evaluation Panel
- reviewing draft documentation submitted more than once.

Allowance is made in the Pricing Schedule for payment on a time basis for any such service performed more than once.

C3.6.3 Payment and monthly reporting

When submitting interim certificates for payment the Service Provider shall use the Employers standard forms and formats. No payment can be made before the Service Provider is registered as a vendor on the Employer's system.

The service provider shall submit payment certificates for all work rendered in the Employer's financial year within that specific year.

The service provider shall submit and update on a monthly basis a cash flow forecast for the remuneration of the full service to be rendered.

The Service Provider shall use the ITIS Platform and Modules to perform certain duties and to provide required information as listed in C3.1.13.

This includes using the Employer's different ITIS platforms;

- ITIS Web
- ITIS Desktop
- ITIS Mobile

The current modules applicable to routine road maintenance (modules can be running on any of the above platforms) and their description are as follows:

(i) Contract Module – management of contracts;
(ii) Routine Road Maintenance Module - issuing of job instructions (estimates, photographs and workflows) and preparing the payment certificate;
(iii) Incident Module – recording of incidents on site; and
(iv) Project Information Module – uploading of employment and training data.

Allowance has been made for these requirements in the Pricing Schedule under 36.05 Monthly Reporting Costs. Failure to fully comply with the duties as listed above may result in payments being withheld and/or termination in terms of Clause 8.4 of the Conditions of Contract. Where the ITIS system is unavailable, the Employer shall issue a written instruction specifying the alternative method of submission to be followed.

C3.6.4 Measurement and payment

Item		Unit
36.01	**Additional duties by the Service Provider**	
	(a) Personnel - Category A	hour
	(b) Personnel - Category B	hour
	(c) Personnel - Category C	hour
	(d) Personnel - Category D	hour
	(e) Emergency	provisional sum (PS)

The unit of measurement for items 36.01(a) to (d) shall be the hour of Service Provider personnel utilised for additional duties.

The rates tendered shall be for the carrying out of any additional duties extra-over the normal Services as specified and as ordered by the Employer. The rates tendered shall include for all personnel costs including overheads and profit. Transport, if required, shall be paid at the rates under payment item 35.04.

The provisional sum for item 36.01(e) shall be paid for in accordance with Clause C.2.1.8 and shall be utilised for designs of Emergency Repairs as a result of flood damage, accident damage, sinkholes, slope failures, etc.

Item		Unit
36.02	**Additional duties by Employer**	hour

The unit of measurement shall be the hour of Employer personnel utilised for additional duties.

The provided negative rate shall be for carrying out additional duties as specified in Clauses C3.1.9, C3.3.4 and C3.5.4 and shall be deducted from the service provider's interim payment certificate immediately after having being informed by the Employer.

The minimum time will always be 2 (two) hours per key person re-evaluated and actual hours will be charged for proof reading draft documentation submitted more than once.

Item		Unit
36.03	**Disbursements**	
	(a) Disbursements	prime cost (PC)
	(b) Handling cost i.r.o. item 36.03(a)	percentage (%)

The prime cost sum under item 36.03(a) is to cover the disbursement cost of personnel, equipment, accommodation, subsistence and documentation associated with undertaking additional duties.

The Prime Cost shall be paid in accordance with Clause C2.1.8.

The rate tendered for handling cost under item 36.03(b) is for the mark-up or other incidental costs incurred by the Service Provider.

Item		Unit
36.04	**Additional duties by sub-service provider**	
	(a) Additional duties	prime cost (PC)
	(b) Handling cost i.r.o. item 36.04(a)	percentage (%)

The prime cost sum under item 36.04(a) is to cover the cost of all work carried out by external sub-service providers as approved by the Employer.

The Prime Cost shall be paid in accordance with Clause C2.1.8.

The rate tendered under item 36.04(b) shall include full compensation for all costs associated with:

(i) producing a schedule of other work envisaged
(ii) compiling a quotation/tender document
(iii) evaluation of quotations or tenders received
(iv) procurement of sub-service providers on approval by the Employer.

Item		Unit
36.05	**Payment and Monthly Reporting cost**	month

The unit of measurement shall be the month.

The rate tendered shall include full compensation for registering on the Employer's ITIS platform and for the management of the ITIS desktop, mobile and web software modules (Contract, RRM, Incident and Information modules as specified in Clause C3.1.13). It shall also include full compensation for using the ITIS desktop, mobile and web software modules to capture job instructions, approving job instructions and finalising the monthly payment certificates. It shall also include the full compensation for capturing and submitting the required information regarding training, empowerment, capacity building, targeted enterprise development, labour and staff returns during the design and construction stage for the consultant and validating similar information captured for the contractor and his sub-contractors and suppliers. It shall further include for all personnel, equipment and other costs, disbursements, overheads and profit.

Item		Unit
36.06	**Project Liaison Committee (PLC)**	

(a)	Establishment of PLC	lump sum (LS)
(b)	Liaison/meetings with the PLC during Design and Construction Phase	provisional sum (PS)
(c)	PLC stipend	provisional sum (PS)
(d)	Handling cost i.r.o. item 36.06(c)	percentage (%)
(e)	Training of PLC members	provisional sum (PS)
(f)	Handling cost i.r.o. item 36.06(d)	percentage (%)

The unit of measurement for pay item 36.06(a) shall be the lump sum. The sum shall include full compensation for all costs associated with the establishment of the PLC.

The provisional sums shall be paid in accordance with Clause C2.1.8.

The provisional sum allowed under pay item 36.06(b) is to cover all costs associated with liaison/attending meeting with the established PLC during the Design and Construction Phases.

The provisional sum allowed under pay item 36.06(c) is to cover the monthly payments to PLC members as prescribed by the Employer.

The rated tendered for handling cost under item 36.06(d) is for the mark-up or other incidental costs incurred by the Service Provider.

The provisional sum allowed under pay item 36.06(e) is to cover all costs associated with training PLC members on their duties and responsibilities.

The rate tendered under item 36.06(f) shall include full compensation for all costs associated with producing a schedule of training requirements, compiling a quotation/tender document, evaluation of quotations or tenders received and for the procurement of a training service provider on approval by the Employer.

Item		**Unit**
36.07	**Market Analysis and Databases**	
(a)	Market analysis	lump sum (LS)
(b)	Establishment and Maintenance of a Targeted Enterprise database	month
(c)	Establishment and Maintenance of a Targeted Labour database	month

The unit of measurement for item 36.07(a) shall be a lump sum.

The sum tendered for item 36.07(a) shall include full compensation for all costs associated with the market analysis in terms of the CIDB guidelines for undertaking a feasibility study (CIDB grading, CSD, RRM database, local/district municipality database, open sessions with contractors from project area, etc.).

The units of measurement for items 36.07(b) and (c) shall be the month.

The rate tendered for item 36.07(b) shall include full compensation for all costs associated with the compilation and monthly maintenance of a Targeted Enterprise database during the Design and Construction Phase.

The rate tendered for item 36.07(c) shall include full compensation for all costs associated with the compilation and monthly maintenance of a Targeted Labour database during the Construction Phase.

C3.7 OFF-SITE MATERIALS TESTING

C3.7.1 Scope

This section covers the requirements for the provision of testing to be undertaken in an off-site facility.

C3.7.2 Standards

The off-site facility shall operate under the umbrella of a SANAS accredited main laboratory that shall be responsible for ensuring that all sampling and testing is carried out accurately and strictly in accordance with the relevant, SANS/TMH1 test methods and accreditation requirements.

The Service Provider shall be responsible for the acts, defaults or neglects of any sub-service provider, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Service Provider, his agent, servants or workmen.

C3.7.3 Testing of materials off-site

All testing shall be carried out in an off-site SANAS accredited commercial laboratory. Provision for the costs of this testing has been made in the Pricing Schedule under a Provisional Sum pay item.

C3.7.4 Measurement and payment

Item			Unit
37.01	**Off-site materials testing**		
	(a)	Provisional sum for off-site laboratory testing by an external SANAS accredited laboratory	prime cost (PC)
	(b)	Handling costs in respect of item 37.01(a) above	percentage (%)

Expenditure under this pay item shall be for all laboratory testing of materials carried out off-site by an external sub-service provider as approved by the Employer.

The % tendered shall include full compensation for costs associated with:

- producing a schedule of all testing envisaged
- compiling a quotation/tender document
- evaluation of quotations/tenders received
- procurement of sub-service provider on approval by the Employer

C3.8 CLOSE OUT

C3.8.1 Scope

This section covers the fulfilling and completion of the project close-out including necessary documentation to facilitate effective completion, hand-over and operation of the project.

The Service Provider shall administer the Works Contract during the period subsequent to the issuing of the Taking-Over Certificate of the Works up to and including the issuing of the Performance Certificate to the Contractor and conclusion of the final payment certificate.

C3.8.2 Taking-over Certificate

Upon a request from the contractor for the Taking-over Certificate (TOC) to be issued in terms of the Conditions of Contract the engineer shall establish compliance with the Works Contract for a TOC to be issued.

The Service Provider shall undertake a full inspection of the Works (which shall include the health and safety aspects as far as reasonably practicable) to identify any outstanding minor works, defects and/or damages for the compilation of a snag list. The inspection shall be undertaken by the Engineer and his representative for the Works.

After the inspection and only when the Engineer is of the opinion that a TOC can be issued, the Service Provider shall arrange an on-site meeting and further inspection with representatives of the Employer, Contractor and RRM Service Provider. At this meeting, parties will be presented with the snag list for consideration. There-after an inspection will follow with all the parties involved to add additional items to the snag list.

After the above meeting the engineer shall re-establish compliance with the Works Contract with involvement of the Employer for a TOC to be issued, failing which the whole process is to be repeated.

The Service Provider shall also complete the updating of all structural inspection (bridges and major culverts) and capture into ITIS (using the capture software) and submit to the Employer for approval before the TOC is issued.

The TOC shall declare the structure (bridges, culverts, roads, sections of roads, etc.) safe for use as required in terms of Construction Regulation 6.1(j).

The engineer’s representative shall be present on the site during the period required to complete the items on the snag list and monitor the completion thereof, unless otherwise agreed with the Employer.

C3.8.3 Contractor’s CIDB performance evaluation

The Service Provider shall undertake the required performance evaluation of the contractor according to the CIDB’s requirements as soon as the contractor requests the issuing of the TOC. The Service Provider shall submit the above to the Employer at the date of issuing of the TOC.

C3.8.4 Construction records (As-builts) and Contract report(s)

The Service Provider shall prepare and submit, in accordance with the Employer’s standard requirements, draft construction records reflecting the works as constructed as well as any deviations from the designs as well as a draft contract report(s) providing information on how the contract was executed. Once reviewed and accepted by the Employer the Service Provider shall prepare and submit the final construction records and report(s).

C3.8.5 Performance Certificate

The Service Provider shall undertake a full inspection of the Works to identify any defects and/or damages before the end of the defects notification period. The inspections shall be undertaken by the Engineer and his representative for the Works. Should both of them not be available, the Service Provider shall propose a person having sufficient knowledge of assessing the work for approval by the Employer.

After the inspection the Service Provider shall arrange an on-site meeting and further inspection with representatives of the Employer, Contractor and RRM Service Provider. At this meeting, parties will be informed of the defects and/or damages identified during the inspection. Thereafter an inspection will follow with all the parties involved to identify any further defects and/or damages.

Once identified defects and/or damages are addressed the engineer shall notify the Employer that the Performance Certificate can be issued.

C3.8.6 Co-ordinate and Monitor Remedying of Defects

The Service Provider shall co-ordinate and monitor the remedying of any defects and/or damages identified during the defects notification period.

Prior to the provision of any service under this sub-clause the Service Provider shall submit to the Employer for approval a schedule of personnel necessary to undertake the additional services including a cost estimate. Payment for this service shall be made in terms of Clause C.3.8.

C3.8.7 Final Payment Certificate

Prior to the compilation of the final payment certificate the engineer shall ensure that all items on the Employer's checklist are complied with. The signed off checklist shall be submitted with the final payment certificate.

The engineer shall only compile and submit the final payment certificate once the Performance Certificate has been issued by the Employer and all unfulfilled financial obligations have been resolved.

C3.8.8 Extended Guarantees

Where the Service Provider is required to perform services (e.g. inspections after the completion date of the Works Contract) relating to extended guarantees for the Works Contract (e.g. Product Performance Guarantees) separate arrangements for remuneration will be made by the Employer under Additional Duties.

C3.8.9 Measurement and Payment

Item		Unit
38.01	**Close Out**	
(a)	**Road works:**	
(i)	**Fee (based on Employer's estimated Cost of the Works)**	**lump sum(LS)**

Payment under item 38.01 will be made as follows:

The unit of measurement under pay item 38.01(a) shall be lump sum. The rate for item 38.01(a)(i) shall include full compensation for all costs, including personnel associated with fulfilling the duties of the Engineer as specified in clauses C3.5.3, C3.5.4 and C3.5.5.

Consumer Price Index shall be applicable in accordance with clause C2.1.6 of the Contract Data

PART C4: SITE INFORMATION

TABLE OF CONTENTS **PAGE**

C4.1 LOCATION OF THE PROJECT C3-53
C4.2 AVAILABLE INFORMATION C3-55
C4.3 ANY ADDITIONAL INFO AS REQUIRED FOR THE PROJECT..... C3-55

C4.1 LOCATION OF THE PROJECT

The proposed project is located on National Route R42 Section 8 from Gauteng/Mpumalanga Border to Delmas, N12 from Victor Khanye/Emalahleni Municipal Border to the Gauteng/Mpumalanga Border, R555 Section 1x from Gauteng/Mpumalanga Border to Victor Khanye/Emalahleni Municipal Border.
The site comprises of the following routes with a total length of approximately 95.32 kilometres:

ROUTE	SECTION	FROM km	TO km	LENGTH kms
N12	19	41	54,48	13,48
N12	20	0	23	23
R555	1EX	0	40,4	40,4
R42	8	0	18,44	18,44
			Total Centreline Length	95,32

The Site shall also include any additional National Route(s) declared within the same locality during the Contract Period where the Client requires such route(s) to be incorporated into the Contract. The Client shall notify the Contractor in writing of any changes to the declared road network for which the Contractor becomes responsible. Upon such notification, the additional road network shall form part of the Site and be subject to the provisions of this Contract.

Please note that site is subject to amended to allow for any provincial or other public road, road section or related asset that is declared or incorporated into the national road network and is formally handed over to SANRAL, or that the Employer instructs the Service Provider in writing to assess or manage pending such transfer, subject to the Contract's variation and payment provisions.

Additional SANRAL properties forming part of the site:

Project No	RDS No	Location Description	Status	Road ID	Start Km	End Km	Property Area (m2)
X.002-105-2019/1	RDS12684	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	15381
X.002-105-2019/1	RDS12680	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	27235
X.002-105-2019/1	RDS12679	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	34020
X.002-105-2019/1	RDS12682	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	23489
X.002-105-2019/1	RDS47267	Rietkol No 237 - IR	Title (SANRAL)	N01219E	41	54,495	5061
X.002-105-2019/1	RDS12686	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	27205
X.002-105-2019/1	RDS12681	Modder East Orchards - IR	Title (SANRAL)	N01219E	41	54,495	33816
X.002-105-2019/1	RDS12248	Geluk No 234 - IR	Title (SANRAL)	N01219E	41	54,495	47281
X.002-105-2019/1	RDS12683	Modder East Orchards - IR	Title (SANRAL)	N01219W	41	54,479	18373
X.002-105-2019/1	RDS12746	Rietkol No 237 - IR	Designated	N01219W	41	54,479	15184
X.002-105-2019/1	RDS47268	Rietkol No 237 - IR	Title (SANRAL)	N01219W	41	54,479	29733
X.002-105-2019/1	RDS12703	Modder East Orchards - IR	Title (SANRAL)	N01219W	41	54,479	13094
X.002-105-2019/1	RDS12747	Rietkol No 237 - IR	Designated	N01219W	41	54,479	5340
X.002-105-2019/1	RDS19298	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	1150
X.002-105-2019/1	RDS12673	Leeuwpoort No 205 - IR	Title (SANRAL)	N01220E	0	68,878	248992
X.002-105-2019/1	RDS08734	Zeekoewater No 311 - JS	Title (SANRAL)	N01220E	0	68,878	4454
X.002-105-2019/1	RDS08720	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	43420
X.002-105-2019/1	RDS08763	Joubertsrust No 310 - JS	Title (SANRAL)	N01220E	0	68,878	9052
X.002-105-2019/1	RDS08765	Joubertsrust No 310 - JS	Title (SANRAL)	N01220E	0	68,878	2620
X.002-105-2019/1	RDS08750	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	17911
X.002-105-2019/1	RDS08736	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	9391

X.002-105-2019/1	RDS08743	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	39343
X.002-105-2019/1	RDS08717	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	60112
X.002-105-2019/1	RDS08724	Zeekoewater No 311 - JS	Title (SANRAL)	N01220E	0	68,878	18519
X.002-105-2019/1	RDS12623	Grootpan No 7 - IS	Title (SANRAL)	N01220E	0	68,878	42476
X.002-105-2019/1	RDS08745	Klipfontein No 322 - JS	Title (SANRAL)	N01220E	0	68,878	16329
X.002-105-2019/1	RDS12247	Van Dyks Put No 214 - IR	Title (SANRAL)	N01220E	0	68,878	196443
X.002-105-2019/1	RDS08733	Witbank Ext 6 (Industrial) - JS	Title (SANRAL)	N01220E	0	68,878	203
X.002-105-2019/1	RDS59483	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	3555
X.002-105-2019/1	RDS08706	Zeekoewater No 311 - JS	Title (SANRAL)	N01220E	0	68,878	272
X.002-105-2019/1	RDS59482	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	12174
X.002-105-2019/1	RDS08718	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	28244
X.002-105-2019/1	RDS59481	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	47208
X.002-105-2019/1	RDS08719	Schoongezicht No 308 - JS	Title (SANRAL)	N01220E	0	68,878	2088
X.002-105-2019/1	RDS12249	Oogiesfontein No 4 - IS	Title (SANRAL)	N01220E	0	68,878	27229
X.002-105-2019/1	RDS12649	Klipfontein No 568 - JR	Title (SANRAL)	N01220E	0	68,878	35
X.002-105-2019/1	RDS12564	Dixon Agricultural Holdings - JS	Title (SANRAL)	N01220W	0	68,835	1789
X.002-105-2019/1	RDS83170	Klipfontein No 568 - JR	Title (SANRAL)	N01220W	0	68,835	148688
X.002-105-2019/1	RDS19662	Waterpan No 8 - IS	Title (SANRAL)	N01220W	0	68,835	1
X.002-105-2019/1	RDS12562	Boschpoort No 211 - IR	Title (SANRAL)	N01220W	0	68,835	316909

C4.2 AVAILABLE INFORMATION

Information obtained from recent instrument surveys is available from the Employer's pavement management system and will be made available to the successful tenderer in electronic format:

- Traffic information
- Falling Weight Deflections (FWD) at network level
- Rut Depths
- Riding Quality
- Macro Texture

C4.3 ANY ADDITIONAL INFORMATION AS REQUIRED FOR THE PROJECT

C4.3.1 Reference Documents

SANRAL File reference numbers

12/9/2-	X.008-004-2026/1F – Eng file requirements.
16/1/4/1-	X.008-004-2026/1F – Construction file
13/5/4-	X.008-004-2026/1F – Minutes (Construction)

Design reference documents

TRH12-	Flexible pavement rehabilitation investigation and design
THM9-	Pavement Management Systems
TRH 4 -	Structural design of flexible pavement
TRH3-	Surfacing Seals
TRH24-	UPGRADING OF UNPAVED ROADS
HMA-	Hot Mix Asphalt guideline manual
M1 manual-	SANRAL best practice manual
M2 manual-	SANRAL best practice manual
Project docs-	SANRAL generic project specification

C4.3.2 Traffic and Road Condition

Information will be provided to successful tenderer.

C4.3.3 Incident Management Systems Report (RIMS Report)

Current information will be provided to successful tenderer.

C4.3.4 Road Condition Report

Current information will be provided to successful tenderer.

C4.3.5 Limiting Factors

Priorities

i. Road Safety of travelling public, engineering staff and construction personnel.
ii. Minimum user delays and damage.
iii. High standard of work.
iv. Accurate budgeting.
v. Achievement of BBBEE goals.
vi. Successful completion of contract.

Constraints

i. Two lanes open to traffic where geometry allows.

ii. No night time work.
iii. Road safety not to be compromised under any circumstances.
iv. Relative high traffic volumes.
v. No overspending of budget.
vi. No seal work in Winter months.

Customers

Road Users – the level of service to remain high and user delays and damage to property to be kept to a minimum.

Key Stakeholders

i. Roads users
ii. Contractor
iii. Engineer

C4.3.6 Risks Analysis

Risk Register			
No	**Key Risk**	**Identified Risk**	**Mitigating Factors**
1	Road Safety	Loss of life and property	Road safety audits & Co-ordination with road and law enforcement authorities
2	Funding	Legal actions, claims for damages sustained by users due to potholes etc,	Prioritization of work Insurance
3	Environmental Management	Non-compliance with legislation. level of public scrutiny SANRAL is exposed	Environmental management policies in achievement of SANRAL's primary objectives are pursued Consulting engineers to oversee compliance to standards by contractors
4	Expanded training	Reputation Risk	Adequate funding in contract Pro-active awareness for training need
5	Proficient consulting services (Project Management)	Inadequate knowledge transfer within companies.	Knowledge transfer and capacity building Project managers closely monitor contractors and consulting resident engineers.
6	All payments are accurate and valid.	Actual project progress does not correlate payment certificate. Collusion between the resident engineer and the contractor used as the basis of payment. Work performed without prior approval Works Authorisations. Prov Sums used without quotes and Works Authorisations approval	Site audits should be performed. All Works Authorisations to be approved in advance for all work not covered by rates in the contract. Minimum of three quotations required for Prov Sum items.
7	Accurate and timeous cash flow projections	Cash flow projections prepared by project managers are inaccurate	Project engineers to exercise greater financial diligence in preparation of monthly/annual cash flow projections. Reasons for variance greater than 10% on monthly forecasts to be provided with each payment certificate.
8	OHS legislation	Compliance Risk	Safety audits
9	Equity targets.	Employment Equity targets have not been met	Awareness of economic Empowerment and job creation results should be improved

C4.3.7 Appendices

- Appendix A: Example of Road Condition Report

- Appendix B: Road Incident Management Systems functions
- Appendix C: Routine Maintenance and Slope Management System Guidance Manual
- Appendix D: Locality Plan
- Appendix E: Occupational Health & Safety
- Appendix F: Safety Inspection Form
- Appendix G: Integrated Transport Information System
- Appendix H: SARDS Manual
- Appendix I: 2nd Tier Procurement Procedure

APPENDIX A

ROAD CONDITION REPORT

APPENDIX B

ROAD INCIDENT MANAGEMENT SYSTEM FUNCTIONS

SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

ROAD INCIDENT MANAGEMENT SYSTEM FUNCTIONS

	RIMS FUNCTIONS	Responsible Entity
1.	**MEETINGS**	
1.1.	**Steering Committee and Provincial Coordinating and Advisory Committee (PCAC) meetings**	
	Three (3) committee meetings will be held in each RIMS system per annum. These meetings are chaired by the nominated chairperson from various services, and the RIMS Coordinator will serve as the secretariat of the committee. The Steering Committee will comprise members from policy/senior and operational management level of the emergency services operating within the geographical boundaries of the RIMS. Emergency Service representatives, should include: • Provincial Ambulance and Emergency Medical Services • Private Ambulance Services • Fire and Rescue Services • South African Police Services (SAPS) • Forensic Pathology Services (FPS) • Traffic Authorities, Metro, Municipal & Provincial • Disaster Management • Centralised Communication Centre (CCC) Non-emergency Service representatives, where appropriate, should include: • Routine Road Maintenance (RRM) – Route Managers (compulsory) • Environmental affairs • Fire Protection Association (FPA) • Breakdown Operators • Chief Officers of Local Authorities • Water Authorities • Automobile Association of South Africa • Toll Route Operator • Motor Industries Federation • Road Authority and maintenance departments • Road Freight Association • South African Road Federation • Specialised Spill Clean Up Companies	RIMS Coordinator
	<u>Membership:</u> It is essential that the respective members are capacitated to make decisions on behalf of their respective organisation. Consistency of members of Steering and Provincial Committees to be maintained by nomination letters be sent to members to confirm their appointment to serve on the RIMS committees.	RIMS Coordinator
	Purpose of the meetings: • Review and Feedback: The RIMS Coordinator is responsible for reviewing the RIMS system based on feedback from the various emergency services involved. • Problem Assessments: Meetings should identify and assess specific challenges and risks based on the RIMS protocols within the system that need intervention. • Meeting Management: The RIMS Coordinator must ensure meetings are productive, addressing all challenges and setting up clear Action Plans to resolve them.	RIMS Coordinator

	• Documentation: All Action Plans and Resolutions must be clearly recorded in the official minutes of the meetings. • Reporting: The RIMS Coordinator must ensure the System Report are compiled and sent to the Chairperson for review prior to the meetings. **The key areas of focus include:** • Training initiatives; Post Incident Assessment (PIA); Simulations; Stakeholder meetings and communication; Ongoing system monitoring.	
	Provincial Reports: The RIMS Coordinator is required to further analyse the data by highlighting all aspects of the system which will include, hot spots, challenges, resources limitations, response and communication challenges etc. The RIMS Coordinator is required to determine all issues impacting on RIMS and establish communication channel, Action Plans or sub working groups to resolve these challenges. *This is discussed at the above meetings.*	RIMS Coordinator
	Arrangements for the meeting include: • Timeously distributing invitations and agenda to members advising them of the details of the meeting; • Ensuring follow up telephonically or via email to ensure attendance to meetings by liaising with Heads of Services, Station Commanders etc. Ensure written confirmation of names of candidates who will attend; • Ensuring an appropriate venue which is usually held at one of the Emergency service offices. Liaise with Route Manager to assist, where required; • Arranging for suitable refreshments or lunch where needed.	RIMS Coordinator
	Minutes: All discussions to be recorded by the RIMS Coordinator and minutes distributed to all members within two weeks of the meeting.	RIMS Coordinator
1.2.	**RIMS PLANNING MEETINGS**	
	The RIMS Coordinator shall attend meetings with the Employer which includes SANRAL RIMS Focus Group meetings, National and Provincial meetings as and when required, and to attend and report on the status of all systems.	RIMS Coordinator
	SANRAL RIMS Focus Group meetings: These are held quarterly and usually rotated in various provinces and includes all SANRAL RIMS System managers as well as their respective Consultants. System feedback and reporting is required, and co-ordination of all systems are standardised by this committee. All systems are audited quarterly by the assigned team and RIMS Co-ordinator is responsible to ensure all Provincial RIMS systems are functioning optimally.	RIMS Coordinator
	National Technical Committee (NTC) meetings: These are usually held a day after the SANRAL RIMS Focus Group meetings. Invitations are sent to members from SANRAL Eastern region who co-ordinates all NTC events. The RIMS Coordinator to submit all respective reports, provincial presentation and feedback to this meeting.	RIMS Coordinator
1.3.	**TASK GROUP MEETINGS**	
	Task Group meetings will be held as and when necessary, to address specific issues such as communication difficulties, system protocol issues, system shortcomings, special campaigns,	RIMS Coordinator

	etc. In some cases, a Task Group will serve as a Sub Steering committee which is established in specific area of that system, in order to deal with the challenges in that particular area, for a certain period of time.	
	Representatives of these meetings will be operational members or Heads of the respective emergency services (see above). Membership of these committees will thus vary according to the issue being discussed.	RIMS Coordinator
	<u>Arrangements</u> for the meeting include: • Timeous distribution of invitations to members advising them of the details of the meeting; • Ensuring follow up telephonically or via email to ensure attendance to meetings by liaising with Heads of services, Station Commanders etc. • Ensuring an appropriate venue and lunch is arranged for attendees. Minutes of the Task Group meetings will be recorded and distributed to all members within two weeks after the meeting.	RIMS Coordinator
1.4	**RIMS STAKEHOLDER LIAISON MEETINGS / EMERGENCY SERVICES**	
	This activity involves: • Ongoing discussions with the emergency services and CCC's concerning the implementation of Incident Management on scene and within their services in accordance with the agreed procedures and protocols of the system. • Engagement with Heads of departments to discuss challenges or shortcomings in the system is important to the success of the systems. • Discussion concerning difficulties encountered by these emergency services as well as possible solutions. • Certain Post Incident Assessment concerns may also be best resolved through Service and RIMS Stakeholder Liaison. • Liaison may take the form of telephonic contact with the members of RIMS or comprise scheduled or spontaneous visits, with various role-players, when in the area for Steering Committee meetings. Written correspondence concerning specific issues raised may be required. • It is the responsibility of both the RIMS Coordinator and Route Manager to have these meetings to deal with challenges or to develop task groups where needed.	RIMS Coordinator & RRM
2.	**REPORTS**	
2.1.	**FACT SHEETS - MONITORING AND DATA EVALUATION REPORTS**	
	Fact Sheets are easy to read handouts highlighting significant statistics in a monitoring period. • The Route Manager is required to create the Fact sheets by extracting graphs from ITIS and drawing up a Bi-annual and Annual Fact sheet. Data manipulation and extractions will be carried out and monitoring documents produced. • The Route Manager is responsible for submitting a formal Fact Sheet Report which indicates trends, Hazlocs, road safety challenges and risks. Engineering plans and interventions should be documented and discussed at the above meetings and at RRM site meetings. • Fact sheets are due to be submitted to the RRM PM and RIMS Coordinator on a Bi-annual and annual basis.	*Route Manage*
	Incident management and reporting; • It is the duty of the RRM Contractor to obtain all information pertaining to incidents on the roads under their management in a standard form and manner. This includes ensuring that all Incident Report Forms (IR) forms are completed.	*Route Manager*

	• Route Manager must ensure that all Incident Report forms are thoroughly completed on the scene. The RIMS Incident Report Form is a document which helps the RRM Contractor to record all information regarding an incident. This form is used to capture data on ITIS. • The above information shall be captured electronically on ITIS by the Route Manager • The above shall be captured electronically and sent to the Employer every 6th and 12th month of each year.	
2.2.	**RIMS PROVINCIAL ANNUAL REPORTS**	
	The RIMS Coordinator is required to analyse functions and challenges and collate it into a Provincial Report for Hazardous locations, indicating each of the system challenges by considering the following: • Summary of all work done in each system. • Ensure comprehensive reports *clearly* reflect challenges, Actions, Resolutions. • Evaluation of services of each system to ensure systems are operating optimally. • Fact sheet and data sent by RM's are analysed into this report. • Hazardous locations for each area and recommendations for intervention from an Engineering, Education and Enforcement aspect. • Review all PIA and simulations that indicate areas of concern where stakeholder engagement meetings may be required. • The identification of high accident locations. • The frequency of these incidents and their nature and severity. • The main causes of incidents. • The number and severity of casualties, fatalities. • Types of vehicles involved. • Actions taken and possible solutions recommended, if and where applicable. • The performance of the Incident Management System with respect to response times, the duration of road closures and partial closures, and specifically identified problems as well as any general observations deemed necessary to be brought to the attention of the Employer. • Any recommendations for the development of new, or the modification of existing protocols. • Defining the various structures and operations of each emergency service and how they manage and respond to road incidents based on the RIMS protocols. • Performance of RIMS in various districts, shortcomings, limitations, challenges, interventions and recommendations. • Updated Resource list for all emergency services and systems.	RIMS Coordinator RIMS Coordinator
2.3.	**PROVINCIAL SYSTEM REPORTS**	
	RIMS Consultant is required to submit the provincial accumulative system reports at NTC meetings. This report captures all work done in each system – Summary of: • All meetings held, • Summary of all actions from minutes of meetings, • Training done/planned, • Simulations, • Post Incident assessments, • Hazardous locations, • ITIS summaries of incidents to date, • Challenges and actions, • Stakeholder engagement meetings, resolutions, • Some of the above information is received from the Accumulative report done by Route Manager. The RIMS Coordinator/ Provincial chairperson to present the above content at the National Technical Committee (NTC) meetings.	RIMS Coordinator

2.4.	**SIMULATION REPORTS**	
	Simulations are subject to the approval of the Employer, to address major challenges in the RIMS system. It is the responsibility of the RIMS Coordinator to set up simulations in collaboration with other stakeholders. Focus on challenges and short comings in the system. After training, test the challenges addressed in RIMS meetings and see if there is improvement or if more intervention is required. CCC simulations are also required to test the effectiveness of communication when dealing with incidents. This should be tested after training has been provided. RIMS Coordinator ensure reports on findings and lessons learnt are distributed to Heads of department and discussed at Stakeholder meetings.	RIMS Coordinator
2.5	**POST INCIDENT ASSESSMENT (PIA) REPORTS**	
	PIA meetings are set up by the RIMS Coordinator where representatives of the emergency services are invited to constructively discuss the management of a specific incident. It is recommended that a PIA be considered after: • Hazardous chemical incidents, or heavy vehicle incidents that results in disruption at the scene; • Incidents requiring road closure or use of alternative routes; • Incidents at which the protocols of the RIMS were not adhered to; • Major Incidents involving 5 or more fatalities; • Well managed incidents that will provide a learning experience. RIMS coordinator to set up further stakeholder meetings in order to resolve challenges on findings.	RIMS Coordinator
3.	**RIMS TRAINING**	

	RIMS coordinator shall provide adequate training to all emergency services personnel and relevant stakeholders.
	• Management and planning of venue, refreshments, leaning material, facilitation and certification of training to be done by the RIMS Coordinator.
	• Various training workshops to be rolled out:
	  ○ RIMS One Day workshop
	  ○ Introduction to Dangerous Goods Awareness training
	  ○ CCC/call centre operator training
		RIMS Coordinator

4..	**ADDITIONAL REPSONSIBILITES OF THE ROUTE MANAGER**	
	Additional duties of the Route Manager: • Submit RRM Monthly accumulative reports to RIMS Coordinator. • Attend RIMS Steering committee and PCAC meetings. • Assist RIMS Coordinator in updating guideline documents, maps and alternative routes. • Ensure alternative routes are travelled annually to assess the safety and provide feedback to RIMS and RRM PM. • Once appointed Route manager to visit the CCC and ensure that they have the contact details and are aware of the change in Route managers within the district. • The Route Manager shall be responsible to ensure that the Contractor is fully aware of the response protocols and the Contractor's duties in this regard and shall monitor the efficiency and quality of the service rendered by the Contractor in respect of incidents occurring on the road. • Ensure Emergency Contractors have training in RIMS within 4 months after appointment. • Ensure that all Standard Operating Procedures (SoP) developed by RIMS are adhered to and applied. SoP's listed as follows:	Route Manager

	○ Abandoned vehicles – management and removal ○ Adverse weather-related incidents and road closures SoP and communication protocol ○ Snow protocol ○ Conventional projects – RIMS hand over on response to incidents ○ Bridge damage reporting ○ Road Closure protocols (to provide awareness of when provincial roads are closed that feed to the SANRAL road. ○ Fire Protection Association – requirements ○ Breakdown services required for removal of vehicles obstructing the roadway and creating a hazard to road users • Attend Steering Committee meetings together with the assistant Route Manager and ensure all minute actions allocated to the RRM are carried out. PCAC meetings are to be attended by the Route Manager (assistant to attend only if the Route Manager is unavailable). • Provide all third-party claim and cost recovery information for incidents to the RIMS PM, including Job Instructions, hours spent and replacement costs, ensure closure of claims is confirmed at site meetings, and provide a final report based on the Letter of Demand/Summons stating whether the claim was paid. • Support SANRAL brand awareness initiatives (roadblocks, meetings and stakeholder engagements) as and when required. • Participate in the Wellness Programme by putting forward names to the Wellness Care Champion and enforcing attendance. • Ensure familiarity with applicable regulations, including Regulation 320 (vehicles left or abandoned on a public road), Section 30 of NEMA (emergency incidents) and Regulation 176 (amber warning lamps).	

INCIDENT REPORT FORM

S A NATIONAL ROADS AGENCY: Western Region

IMS/AUTHORITY:		INCIDENT NO:	
Day/Date:		Time:	

CONTROL ROOM INFORMATION:

Operator's Name:			Caller's Name:	
Call Received Via:	L/line:		Radio:	
	Cell:		Other:	
	SOS:			

LOCATION OF INCIDENT:

Route (eg N1, M2):	N	R	Section:		Direction of Travel:	N	S
	M	P	Km Marker:			E	W

Description of Location:

TYPE OF INCIDENT: (Please tick (✔) the appropriate box)

Collision:		Secondary Collision:		Other:	
Hazardous Material:		Breakdown:		Please Specify:	

PROBABLE CAUSE/REASON OF INCIDENT: (Please tick (✔) the appropriate box)

Pedestrian related:		Falling asleep:		Drunk in charge:	
Ignore yield/stop/robot:		Driver lost control:		Overheating:	
Head on collision:		Vehicle reversed:		Vehicle on fire:	
Insufficient foll. distance:		Fuel/oil spill:		Veld fire:	
Cut in front/side swipe:		Animals in road:		Hail/snow:	
Enter traffic unsafely:		Mechanical failure:		Lost load:	
Speeding:		Tyre burst:		Natural causes:	
Dangerous stop/park:		Object in road:		Other:	
Slippery road:		Blinded:		Please specify:	

NUMBER OF INJURIES:	Yes	No	??	**ENTRAPMENTS:**	Yes	No	??
Slight/Green:				Total entrapments:			
Serious/Yellow, Red:							
Fatal/Blue:				Total injuries:			

INCIDENT REPORT FORM (Cont)

SERVICES ALERTED:

Service:	Provincial/ Local Authority:	Person Notified:	Time of First Call:	Time of Second Call:	Time of Arrival:	Time of Departure:
Traffic:						
Ambulance						
SAPS						
Rescue						
Fire						
Hazmat						
Other (specify):						
e.g. Tolcon/Media/						
Clean-up/						
Breakdown/						
Local Auth/Other						

TOW OPERATOR(S) USED:

Private towing: Yes | No

Traffic Department Tow Contract Used: Yes | No

Name of Operator	Tow Vehicle Registration No.	Destination to which Vehicle was Towed	Damaged Vehicle Registration No.

VEHICLE(S) / OBJECT(S) INVOLVED: (# indicate how many involved)

Heavy Vehicle (#):		Bakkie (#):		Pedestrian (#):	
Articulated Vehicle (#):		Motor Car (#):		Animal (#):	
Tanker (#):		Occupants (#):		Roadside Object (#):	
Bus (#):		Motor Cycle (#):		Other (#):	
Minibus (#):		Bicycle (#):		Please specify:	

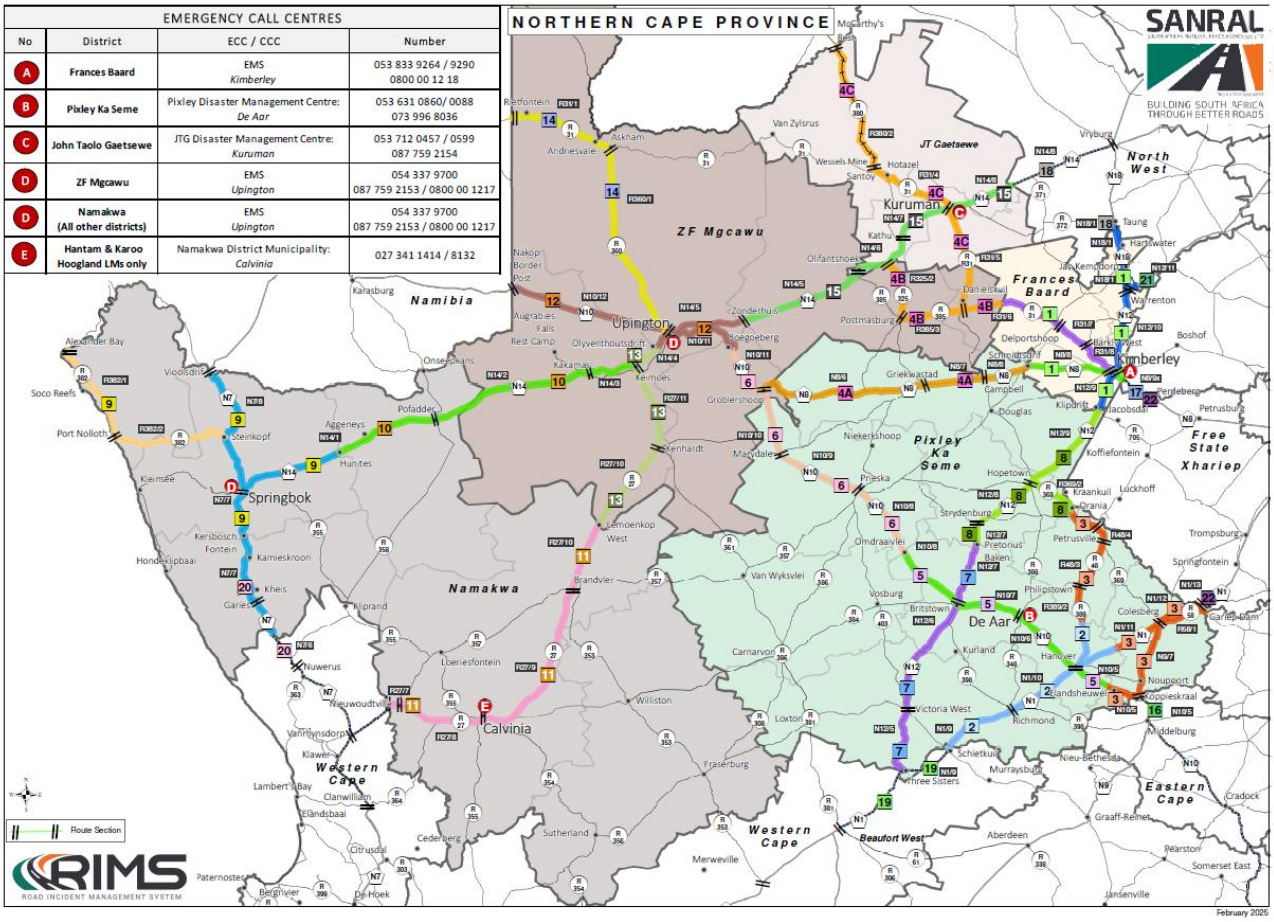
DESCRIPTION OF INCIDENT: _____

_____

PROBLEMS / COMMENTS: _____

DEBRIEFING REQUIRED? Yes | No

Requested By Whom: _____ Organisation: _____


EMERGENCY CALL CENTRES
No | District | ECC / CCC | Number
A | Frances Baard | EMS Kimberley | 053 833 9264 / 9290 0800 00 12 18
B | Pixley Ka Seme | Pixley Disaster Management Centre: De Aar | 053 631 0860/ 0088 073 996 8036
C | John Taolo Gaetsewe | JTG Disaster Management Centre: Kuruman | 053 712 0457 / 0599 087 759 2154
D | ZF Mgcawu | EMS Upington | 054 337 9700 087 759 2153 / 0800 00 1217
D | Namakwa (All other districts) | EMS Upington | 054 337 9700 087 759 2153 / 0800 00 1217
E | Hantam & Karoo Hoogland LMs only | Namakwa District Municipality: Calvinia | 027 341 1414 / 8132
NORTHERN CAPE PROVINCE
SANRAL
BUILDING SOUTH AFRICA THROUGH BETTER ROADS
Namibia
ZF Mgcawu
JT Gaetsewe
Frances Baard
Pixley Ka Seme
Namakwa
Upington
Kuruman
Kimberley
Springbok
Calvinia
De Aar
Western Cape
Eastern Cape
North West
Free State
Route Section
RIMS
ROAD INCIDENT MANAGEMENT SYSTEM
February 2025

Sensitivity - General

APPENDIX C

ROUTINE MAINTENANCE AND SLOPE MANAGEMENT SYSTEM GUIDANCE MANUAL

APPENDIX D

LOCALITY PLAN

APPENDIX E

OCCUPATIONAL HEALTH & SAFETY

E1: Health & Safety Specification for Service Provider during Construction

E2: Health & Safety Specification for Contractors during Construction

E3: OHS Audit Questionnaire

Sensitivity - General

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS for SERVICE PROVIDER

CONTRACT SANRAL X.008-004-2026/1F

SCOPE OF WORKS: CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER , R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI.

TABLE OF CONTENTS **PAGE**

1. NOTE TO CONSULTING ENGINEERS C3-75
2. PURPOSE C3-75
3. DEFINITIONS AND ABBREVIATIONS C3-75
4. HEALTH AND SAFETY POLICY C3-78
5. ROLES & RESPONSIBILITIES C3-78
6. HSE TRAINING AND COMPETENCE C3-79
7. NOTIFICATION OF CONSTRUCTION WORK C3-79
8. DUTIES C3-79
9. DESIGNING FOR HEALTH, SAFETY AND THE ENVIRONMENT C3-80
10. MANAGEMENT AND SUPERVISION C3-80
11. RISK MANAGEMENT C3-80
12. LEGAL COMPLIANCE & DOCUMENT CONTROL C3-81
13. OPERATIONAL INTEGRITY C3-82
14. OCCUPATION HEALTH & HYGIENE C3-83
15. WASTE MANAGEMENT C3-84
16. HAZARDOUS SUBSTANCE MANAGEMENT C3-84
17. OPERATIONAL PROCEDURES C3-85
18. HSE NON-COMPLIANCE C3-85
19. INCIDENT MANAGEMENT C3-86
20. PROJECT SPECIFIC CONSTRUCTION REQUIREMENTS C3-87

E1: Health and Safety Specification for Service Provider during Construction

1. NOTE TO CONSULTING ENGINEERS

a) The Occupational Health and Safety Act, Act 85 of 1993 and its Regulations together with SANS Codes set out minimum standards with regards to Occupational Health and Safety. The South African National Roads Agency SOC Limited (SANRAL), has developed this Occupational Health and Safety Specifications with these minimum standards in mind and in certain stages the requirements of SANRAL exceeds the minimum legal requirements to follow best practices and to ensure a healthy and safe workplace for all.

b) SANRAL in no way assumes the Consultants legal liabilities and responsibilities. The Consultant is and remains accountable for the quality and execution of his health and safety programme for his employees. This Health and Safety Specification reflects minimum legal and SANRAL requirements and should not be construed as all encompassing.

c) It is very important for the Consultant to note that when the Consultant carry out any type of construction work, as per the definition, the Consultant will be regarded as a Contractor, as per the definition and must then comply with the requirements of the Construction Regulations and in particular Section 7.

d) It is realized that the Consultant may have its own Health and Safety Management system and safe work practices. The intention of this Health and Safety Specification is not to change the Consultants Health and Safety management system, but for the Consultant to use its current Health and Safety management system to draw up a project specific Health and Safety plan according to these specifications as well as to legally comply with the Construction Regulations, GNR.84 of 2014.

e) It is the responsibility of the Consultant to make themselves conversant and comply with the requirements and conditions contained in the various legislation pertaining to their profession and scope of works at all times.

f) This document is not exhaustive of all duties imposed by the Occupational Health and Safety Act, Act 85 of 1993 and its Regulations, governing the duties and obligations of a Consultant / Designer performing duties in terms of an agreement with the client (SANRAL). These duties are fully described in the Occupational Health and Safety Act, Act 85 of 1993 and its Regulations and it is the duty of every Consultant / Designer to acquaint themselves therewith before commencing work.

g) Words used herein in the singular shall be deemed to include the plural and male shall include female and vice versa, unless the context otherwise requires.

2. PURPOSE

This document is compiled to ensure that the Professional Consultant are aware of the Occupational Health and Safety requirements when working on a SANRAL contract, as well as to make them aware of their legal liabilities and responsibilities as per the Occupational Health & Safety Act, Act 85 of 1993, and its Regulations.

3. DEFINITIONS AND ABBREVIATIONS

Assessment – An opinion or a judgment about someone or something that has been thought about very carefully.
At-risk behavior – Conduct that unnecessarily increases the likelihood of an injury or incident.
Audit – A systematic and documented review of the effectiveness of implementation of processes, programmes and procedures, based on general process criteria.

Baseline risk assessment – This is the initial assessment of risk in a workplace. It is a broad assessment and includes all activities taking place on site, but does not include risk control measures or safeguards.

CIDB – Construction Industry Development Board
Client – Any organization or person for whom construction work is performed. For the purpose of this document, the client is the South African National Roads Agency SOC Limited.

Communicate – The process of two way dialogue which is understood by both parties.
Competence – A combination of attributes such as knowledge, training, experience and qualifications to assure successful performance.
Competent Person – Means a person who has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No. 67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and is familiar with the Act and with the applicable regulations made under the Act.
Consequence – Outcome or impact of an event.
Continual Improvement – A recurring process of enhancing performance to achieve consistent improvements in overall performance.

Contractor – An employer as defined in section 1 of the OHS Act, who performs construction work

Construction Work – According to the Construction Regulations, any work in connection with:

- The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- The construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work.

Corrective Action – An action taken to eliminate the cause of a detected non-conformity or other undesirable situation.

Construction Regulations (CR) – Construction Regulations, GNR. 84 of 2014

Contractor – An employer who performs construction work.

Critical equipment – A piece of equipment or a structure whose failure to perform to design specification, has the potential to result in a major accident event.

Design – in relation to any structure, includes drawings, calculations, design details and specifications.

Designer – a) competent person who:

- Prepares a design
- Checks and approves a design
- Arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
- Designs temporary work, including its components

b) an architect or engineer contributing to, or having overall responsibility for a design
c) a building services engineer designing details for fixed plant
d) a surveyor specifying articles or drawing up specifications;
e) a contractor carrying out design work as part of a design and building project; or
f) an interior designer, shop fitter or landscape architect

DMR – Driven Machinery Regulations, GNR. 295 of 26 February 1988

Documents – Structured units of recorded information and its supporting medium (paper or electronic).Most records are documents, but not all documents are records. A document becomes a record when it is part of a business transaction, is kept as evidence of that transaction and is managed within a record-keeping system.

EIR – Electrical Installation Regulations, GNR. 242 of 6 March 2009

Emergency – An abnormal occurrence that pose a threat to the safety or health of employees, customers, or local communities, or which can cause damage to assets or the environment.

Employee – An individual who is employed by or works for an Employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person.

Employer – Any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerates him, but excludes a labour broker as defined in section 1(1) of the Labour Relations Act, 1956 (Act No. 28 of 1956). For the purpose of this document, the employer is the South African National Roads Agency SOC Limited.

EMR – Electrical Machinery Regulations, GNR. 250 of 25 March 2011

Environment – The surroundings or conditions in which a person, animal or plant lives or operates, including air, water, land, natural resources and habitats.

Excavation work – The making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping

GAR – General Administrative Regulations, GNR. 929 of 25 June 2003

GMR – General Machinery Regulations, GNR. 1521 of 5 August 1988

GSR – General Safety Regulations, GNR. 1031 of 30 May 1986

Harm – A significant and or long lasting adverse effect on people, the environment or the community.

Hazard – A source, situation or act with a potential for harm in terms of human injury or ill health.

Health and Safety File – Means a file, or other record in permanent form, containing the information in writing as required by the Construction Regulations, GNR. 84 of 7 February 2014, Section 7(1)(b).

Health and Safety Plan – Means a project specific documented plan in accordance with the client's health and safety specifications, as required by the Construction Regulations, GNR. 84 of 7 February 2014, Section 7(1)(a).

Health and Safety Specification – Means a project specific document prepared by the client pertaining to all health and safety requirements related to construction work, as required by the Construction Regulations, GNR. 84 of 7 February 2014, Section 5(1)(b).

HSE – Health, Safety and Environment. Commonly used in the format HSE.

Incident – Work-related events (including accidents which give rise to injury, ill health, fatality or emergencies) that have resulted in, or has the potential to result in adverse consequences to people, the environment, property, reputation or a combination of these.

Likelihood – A description of probability or frequency, in relation to the chance that something will occur.

Lost Time Injury (LTI) – When a person is injured during the execution of his/her duties and as a result of the injury is unable to perform his/her regular duties for one full shift or more on the day following the day on which the injury has incurred, whether a scheduled work day or not(weekend).

Management System – Management processes and documentation that collectively provide a systematic framework for ensuring that tasks are performed safely, correctly, consistently and effectively to achieve a specified outcome and to drive continual improvement in performance.

Mandatory – An agent, contractor or sub-contractor for work, but without derogating from his status in his own right as an employer or a user.

MSDS – Material Safety Data Sheet

Near Hit / Near Miss – Any occurrence or situation which had the potential for adverse consequences to people, the environment, property, reputation or a combination of these.

Non-conformance – Any deviation from work standards, practices, procedures, regulations that could either directly or indirectly lead to injury or illness, property damage, damage to the environment or a combination of these.

OHS Act – Occupational Health & Safety Act, 85 of 1993

Policy – Statement by an organization of its intentions and principles in relation to its overall performance which provides a framework for action and for the setting of its objectives and targets.

PPE – Personal Protective Equipment

Preventive Action – An action implemented to eliminate the cause of a potential non-conformity or other undesirable potential situation.

Principal Contractor – An employer appointed by the client to perform construction work and who is in overall control and management of a part of or the whole construction site.

Procedure – A specific documented way to carry out an activity or a process.

Records – Recorded information, in any form that is kept as evidence. Records include monitoring results, evidence of training, audits, inspections and calibration reports.

Risk Assessment – A process of evaluating the risk(s) arising from hazards taking into account the adequacy of any existing controls and deciding whether or not the risk(s) is acceptable.

Risk Management – The ongoing treatment of risks through the application of management policies, processes, procedures and risk control measures.

Risk – A combination of the likelihood of an occurrence of a hazardous event or exposure and the severity of injury or ill health that can be caused by the event or exposure.

Root Cause – The cause of the incident that, when rectified, will prevent the recurrence of not just incidents with those exact circumstances, but others with similar causes.

SACPCMP – South African Council for Project and Construction Management Professions

SANRAL - South African National Roads Agency SOC Limited

Supplier – A person or company that supplies material or equipment to a contractor on a construction site, but does not physically carry out construction work on the construction site.

The Act – The Occupational Health and Safety Act No. 85 of 1993

The Site – The area where work is carried out for SANRAL as defined on the front page of this document.

WAH – Acronym for Working at Heights

4. HEALTH AND SAFETY POLICY

Consultants are expected to have their own written Health and Safety Policy. The policy should declare their attitude and approach to the health, safety and welfare of their employees and others. Provision must be made to review the policy annually and the CEO or Managing Director must sign and date the policy to indicate his commitment to ensuring the health and safety of his employees.

5. ROLES & RESPONSIBILITIES

Every Consultant is considered to be an employer in his own right and shall comply with all legal requirements pertaining to an employer, which include the responsibility to provide as far as reasonably practicable a safe and healthy working environment for his employees, as per Section 8 of the OHS Act.

In conjunction with Section 8 of the OHS Act, all employees on the project are responsible for their own safety as well as the safety of persons who may be affected by their acts, as per Section 14 of the OHS Act. It is the responsibility of each employee to ensure that he acts in a safe manner before, during and after work is carried out.

The consultant shall ensure that where required by the OHS Act and Regulations, competent employees are appointed in writing. These appointments must be project / contract specific and specific to the tasks that will be performed. Every appointment must display the duties of the person appointed and training certificates from a registered training provider must be attached to such appointment (where applicable).

6. HSE TRAINING AND COMPETENCE

Where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No. 67 of 2000), those qualifications and training must be regarded as the required qualifications and training and employees must have attended courses of the aforementioned nature to be considered competent in the task.

All employees that forms part of the construction work must be trained and competent. Employees formally appointed to perform a certain duty must be in possession of a training certificate, received from a registered training provider. All consultant employees must as a minimum have received site specific safety induction training as well as task specific risk assessment training from the Principal Contractor.

Training Needs – There shall be a system in place to determine the training requirements of each individual, based on the tasks that the employee will perform as well as to ensure the health and safety of fellow employees and the public. Special attention should be given to employees who are new hires, new to the task or have combined responsibilities.

Basic Safe Work Training (Induction Training) – Every Consultant shall ensure that his employees are inducted into his own company Health and Safety System and must ensure that his employees receive site specific safety induction and task specific risk assessment training from the Principal Contractor. The Consultant must have evidence that his employees have been trained on the relevant procedures prior to and during the project duration.

Formal Training – All qualifications for which there are SAQA registered training courses, must be regarded as the minimum required qualifications and training. To be deemed “competent” an employee must have received training at a registered training provider, the training course must be registered and if there is an assessment, the employee must have been found competent after the assessment. A person cannot be deemed competent after awareness training only.

The Consultant shall ensure that his employees, have received appropriate training for the type of work that will be performed, e.g. Working at Heights, Risk Assessment training etc.

Records – Record of all training shall be kept by the Consultant and shall be readily available. Records shall make provision for refresher training where applicable. Where an employee is legally appointed with certain duties and responsibilities a copy of the training certificate must be attached to the appointment.

7. NOTIFICATION OF CONSTRUCTION WORK

Construction Regulation, 2014 Section 4 requires that the provincial director of the Department of Labour is notified at least 7 days prior to the execution of excavation work, elevated work where there is a risk of falling (working at heights), demolition work or work where explosives are used. Therefore, if the Consultant needs to e.g. dig test pits, or do a bridge inspection and the risk of falling exists, the Consultant needs to notify the provincial director in writing on a form similar to Annexure 2 in the Construction Regulations

8. DUTIES

The Consultant is the Designer of the structures to be build. As a Designer, the Consultant need to comply and adhere to the requirements of Section 6 of the Construction Regulations. The Consultant needs to take health and safety into consideration when designing the structure as well as for future maintenance on the structure.

When the Consultant carry out any type of construction work, as per the definition, the Consultant will be regarded as a Contractor, as per the definition, and must then comply with the requirements of the Construction Regulations and in particular Section 7.

The Consultant is the Clients managing agent, who will manage the construction work on behalf of the client.

9. DESIGNING FOR HEALTH, SAFETY AND THE ENVIRONMENT

Designing for safety is a process aimed at minimizing injury, death, property damage or destruction and harm to the environment, by utilizing an approach to identify and eliminate or control hazardous areas. The Consultant / Designer must implement a process that ensures safety is incorporated in the design process, which includes temporary works as contemplated in the Construction Regulations, 2014 Section 12.

The Consultant must communicate the anticipated risks and hazards resulting from the design to the Client and the Client Construction Health and Safety Agent who will ensure that such anticipated risks and hazards reflects in the tender documentation for Contractors.

10. MANAGEMENT AND SUPERVISION

The Consultant will manage the construction project on behalf of SANRAL and must ensure that the construction work is carried out safely and legal compliance is adhered to at all times. As the managing agent, the Consultant must appoint a competent person in writing as agent to act as the Clients representative in terms of health and safety on the project.

11. RISK MANAGEMENT

When the Consultant carry out any type of construction work, Section 9 of the Construction Regulations must be adhered to. A formal risk-based approach must be followed to ensure hazard control measures are implemented to an acceptable reasonable practical level. The Consultant and his employees shall be responsible to ensure all hazards pertaining to his scope of activity are proactively identified, the risks assessed and appropriately eliminated or minimized and managed on an ongoing basis. Risk assessments shall also identify possible and potential environmental, health and hygiene issues pertaining to each hazard with potential exposures and limits.

a) Hazard Identification and Risk Assessment (Construction Regulation 9)

i. Development of Risk Assessments

The Consultant shall, before carrying out any type of construction work and during such work, conduct a risk assessment by a competent person, appointed in writing. The baseline risk assessment as provided by the client may be used to draw up a in-depth task specific risk assessment that can be used on site. Please note that the risk assessment must be site specific.

The risk assessment shall include, as far as is reasonably practicable, at least:

- The task and task step
- the identification of the risks and hazards to which persons may be exposed to during the task or task step;
- the analysis and evaluation of the risks and hazards identified, inclusive of a residual risk rating methodology. The method to be used is not prescribed;
- a documented plan of safe work procedures, to mitigate, reduce or control those residual risks that have been identified as unacceptably high, by means of the rating system;
- a monitoring plan;
- a review plan, inclusive of dates to be adhered to; and
- ergonomic related risks are to be analysed, evaluated and addressed as part of the process.

b) Risk Assessment Monitoring

The Consultant shall ensure that a monitoring plan for all risk assessments are in place. Risk assessments must be monitored to ensure effectiveness and employee understanding. The monitoring of risk assessments shall be formal and records thereof shall be available for audit purposes.

c) Review of Risk Assessment

The Consultant shall review the hazard identification, risk assessments and standard safe working procedures prior to any construction related work activity and shall ensure that the risk assessment is site specific.

Activities carried out without conducting a risk assessment or found to be non-compliant with the risk assessment, will be stopped until such time a risk assessment is compiled and work is carried out according to the risk assessment.

Risk assessments must be fully communicated to all relevant personnel and must be considered when establishing training, awareness and competency requirements.

11.1 Baseline Risk Assessment

Based on the baseline risk assessment as per 20.1 below, SANRAL has developed this health and safety specification which shall act as a set of OH&S rules that shall be applied to regulate the OH&S aspects of the Consultants construction work to be carried out. The baseline risk assessment must be used by the Consultant to develop task specific risk assessments before any construction related work commences.

The Baseline Risk Assessment will not identify risks or control measures, this must be identified by Consultant when preparing the Issue Based Risk Assessments. The Baseline Risk Assessment will highlight all work for which the Consultant must prepare safe work procedures and or work method statements.

11.2 Continuous Risk Assessment

The Consultant shall continuously assess the risks of the activities that are carried out. Risk assessments must be in writing, site specific and must be reviewed continuously to ensure it is current and it address all the relevant hazards and risks associated with the specific activity at the specific site.

The Risk assessment must be discussed with the whole work crew before the activity starts and the work crew must acknowledge in writing having discussed the risk assessment and that they understand it. This acknowledgement must be on site and must be available to the client for audit purposes.

12. LEGAL COMPLIANCE & DOCUMENT CONTROL

The Consultant is required to implement systems and procedures to ensure legal compliance through:

- Identification of all relevant HSE legislation, standards and codes applicable to its operations.
- Have available copies of all relevant HSE legislation, standards and codes for reference purposes.
- Update legislation, standards and codes with any changes
- Communicate to all employees any changes that may affect their accountabilities and conformances
- Incorporate any legal requirements into their HSE management system and designs.
- Monitor and review their HSE management system for effectiveness.

The Consultant shall, as a minimum, comply with:

- The Occupational Health and Safety Act and Regulations (Act 85 of 1993), an up-to-date 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 Consultant shall comply with the Mine Health and Safety Act, 1996 (Act No. 29 of 1996), and its regulations and any other OH&S requirements that the mine may specify. An up-to-date copy of the Mine Health and Safety Act and its regulations shall be available on site at all times.

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 Consultant shall be conversant with and shall comply with these regulations.

12.1 Legal Appointments

All legal appointments of the Consultant regarding the Health and Safety of his employees who are to carry out construction work on the project are addressed and governed by the OHS Act and applicable Regulations.

i. Overall Supervision and Responsibility for OH&S

The client will appoint the Consultant who shall be the managing agent of the client on the project once construction works start. A Mandatory agreement as per Section 37.2 of the OHS Act, shall be signed between the client and the Consultant.

It is a requirement that the Consultant, when he appoints sub service providers, includes a Mandatary agreement in his agreement with such sub service providers

ii. Specific Supervision Responsibilities for OH&S

The Consultant shall appoint designated competent employees and/or other competent persons as required by the OHS Act and Regulations, as well as this specification. 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 to and agreed with the appointees. Where applicable, the training certificate must be attached to the appointment. Notice of appointments shall be submitted to the Employer. All changes shall also be communicated to the Employer.

Below is a list of possible appointments for the project, which is not an all-inclusive list, but for reference purposes only:

Appointment	**Legal Reference**
Assistant to CEO	OHS Act 16(2)
Construction Health & Safety Agent	CR 5(5)(6)
Risk Assessor	CR 9(1)
Fall Protection Plan Developer	CR 10(1)(a)
Structure Inspector	CR 11(2)(a)
Temporary Works Designer	CR 12(1)
Excavation Supervisor	CR 13(1)(a)
Incident investigator	GAR 9(2)
Ladder inspector	GSR 13(a)
First Aider GSR	GSR 3(4)

13. OPERATIONAL INTEGRITY

The operational integrity of plant, equipment, structures and protective systems must be monitored and assured on an ongoing basis throughout the project cycle. Hazards must be identified, assessed and as far as reasonably practicable, eliminated or the risks treated to as low as reasonable practicable (ALARP).

13.1Plant & Equipment Integrity

13.1.1 Construction Plant & Equipment

The Consultant shall maintain all his items of plant and equipment necessary to perform the required construction work in a safe condition.

The client reserves the right to inspect items of plant and equipment brought to site and used on site by the consultant. Should it be found that any item is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, the consultant will be advised of such observation / inspection, and the Consultant shall be required to repair, make safe or remove such item from operation and replace it with a safe and adequate substitute.

The Consultant shall ensure that all plant, equipment, and power tools that he brings onto and use on site for construction work purposes are:

- Appropriate for the type of work to be performed
- Placed on a register and inspected by a competent person or the authorized operator before use, daily or monthly dependent on Legislation and project requirements.
- Record inspection findings on a register that must be kept on site.
- The inspection register shall reflect the serial number of the plant, equipment or power tool.
- Maintained and used in accordance with the manufacturers recommendations
- Have adequate machine guarding fitted to all exposed rotating or moving parts, as reasonably practicable, that have the potential to cause harm
- All electrical power supply units are protected with operational earth leakage devices.
- Any defective, damaged or sub-standard equipment must be marked as unsafe for use and removed from operation as soon as possible

13.1.2 Standards and Registers

For construction work purposes, the Consultant is expected to:

- Set up an initial set of registers as per the requirements of the OHS Act and Regulations.
- Complete the registers for each piece of plant, tool and equipment brought on and used on site by the Consultant or his employees.
- Maintain a complete, continuous and comprehensive inspection and service history in these registers or checklists
- Ensure daily, weekly, monthly inspections are done and recorded for all plant, tools & equipment by a competent person as required by the OHS Act and Regulations.

14. OCCUPATION HEALTH & HYGIENE

14.1 Medical Fitness for Duty

All Consultant employees that carry out construction work activities, shall undergo medical examinations and be certified fit for duty by an Occupational Health Practitioner before they are allowed to work on site.

The medical certificate must be in the form of Annexure 3 of the Construction Regulations and stipulate the possible exposures the employee might be exposed to during the execution of the construction work.

It is recommended and in the best interest of the Consultant to implement pre-employment as well as exit medical surveillance, especially with regards to Section 8 of the Noise Induced Hearing Loss Regulation.

14.2 First Aid

According to GSR 3(4), where more than 10 employees are employed at a workplace / worksite, the Consultant shall ensure that there is at least one trained first aider for every group of 50 employees at the workplace / site. First Aid boxes must be provided where more than 5 employees are employed and must be readily available and accessible for the treatment of injured persons at the workplace.

To ensure immediate treatment of an injured person, it is recommended that all work crews have at least one trained first aider, with a fully stocked first aid box, irrespective of the number of people in the work crew. This is especially important when Consultants work at great distances from the nearest emergency facility or town. These persons shall be appointed in writing as the first aiders with their certificates attached as proof of competency.

The minimum contents of the first aid box shall be as per the supplied list in the General Safety Regulations.

All treatments done must be recorded on a register and kept with the first aid box. A trained and appointed first aider must be responsible for the first aid box and its content. Used content must be replenished as soon as possible.

In order to ensure prompt response at the emergency facility it is recommended that the W.Cl 2 forms be partially completed with the employers' details, for medical treatment cases.

14.3 Workers Compensation Registration

The Consultant shall ensure that his employees are covered for any occupational injuries and illnesses in terms of the Occupational Injuries and Diseases Act 130 of 1993, which cover shall remain in place and up to date for the duration of the project.

14.4 Hygiene Facilities

The Consultant shall ensure compliance to Section 30 of the Construction Regulations with regards to facilities on the construction site as well as where accommodation is provided to employees on remote sites. The Consultant shall ensure that the facilities are kept clean at all times, either through a service provider or self-employed persons.

14.5 Health related Epidemics and Pandemics

The Service Provider shall, ensure that the requirements stipulated in the Hazardous Biological Agents (HBA) Regulation are adhered to and in particular the following as described in the mentioned Regulation:

- Information and training of employees
- Duties of person that may be exposed to HBA's
- Risk Assessments by the employer (Service Provider)
- Monitoring exposure at the workplace
- Medical surveillance of employees
- Keeping of records
- Control of Exposure to HBA's
- Personal Protective Equipment and facilities
- Maintenance of control measures and facilities
- Prohibitions

15. WASTE MANAGEMENT

The Consultant shall comply with all applicable and relevant Waste management legislation, as well as municipal bylaws applicable to waste management.

It is recommended that the Consultant have a waste management plan which must be implemented on the construction site and which will have the objective to ensure that waste is managed according to the Waste Management Hierarchy:

- Reduce what you can. If you cannot reduce then,
- Re-use what you can. If you cannot re-use then,
- Recycle what you can. What you cannot recycle,
- Convert into energy sources. If it cannot be converted to an energy source,
- Dispose of in a landfill – this is only to be done as a last resort and disposed without endangering human health and without using processes or methods which could harm the environment.

16. HAZARDOUS SUBSTANCE MANAGEMENT

The Consultant shall ensure that hazardous substances brought onto site are easily identifiable and stored according to the requirements of the General Safety Regulations, GNR. 1031 of 1986, Section 4.
Where flammable liquids are being used or stored, this must be done in a manner which would not cause a fire or explosion hazard.

The Consultant shall have Material Safety Data Sheets (MSDS) readily available for flammable, hazardous and toxic chemical substances and materials brought onto site and shall ensure that his employees are trained in these MSDS's.

Flammable, hazardous or toxic chemical substances may not be stored in empty food or drink containers. Empty flammable, hazardous and toxic containers must be disposed of in a safe manner, which will prevent further use of such a container.

Asbestos

A survey of the construction site must be done during site establishment, to locate any asbestos. Should asbestos be located, the conditions of the Asbestos Regulations, GNR. 155 of 2002 must be followed and complied with.

17. OPERATIONAL PROCEDURES

Each construction activity shall be assessed by the Consultant 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 Consultant:

- to be conversant with all relevant Regulations;
- to comply with their provisions;

- to include them in his OH&S plan where relevant

18. HSE NON-COMPLIANCE

The Client has a legal duty in terms of Construction Regulation 5(1)(q) to stop any unsafe work on the construction site. Any unsafe construction related activity that the Consultant performs will be stopped until such time as the Consultant has rectified the non-compliance or unsafe act/condition.

The Consultant as managing agent for the Client has a legal duty according to the Construction Regulation 5(1)(q) to stop a contractor from executing any activity which poses a threat to the health and safety of persons. Depending on the seriousness of the non-compliance only the specific activity may be stopped until the non-compliance is rectified or the whole operation may be stopped.

It is also the duty of every employee to take reasonable care of his own health and safety and of other persons who may be affected by his acts as per OHS Act, Section 14(a). Keeping this in mind, it is required of the Consultant to ensure his employees has the right to remove themselves from any unsafe situation or work activity, without any negative consequence to them until such time as the Consultant has made the unsafe situation or activity as safe as practicable possible.

18.1 Contracting Philosophy

Any site specific hazards and safety management expectations will be made known to the Consultant prior to the work commencing on site. Legal OHS requirements contained in the OHS Act and Regulations as well as SANS Codes are the minimum requirements the Consultant must apply during this contract with regards to Occupational Health and Safety. The Consultant shall apply, implement and enforce the minimum OHS Act & Regulations and SANS Codes requirements.

18.2 Indemnity by Consultant

The Consultant 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 caused by:
  i. Unsafe acts caused by all or any of the Consultants employees;
  ii. Unsafe conditions which resulted from the failure to carry out any legal obligation by all or any of the Consultants employees;

(b) any unlawful, riotous or disorderly conduct by or amongst the Consultants employees.

18.3 Consultant Conduct

Guidelines to the most important rules that shall be implemented and maintained by the Consultant:

- Complete compliance to the OH&S Act and Regulations
- Hazard identification and Risk Assessments for all construction related activities
- DSTI talk before construction work commences
- Safe access and egress to and from work areas.
- Compulsory use of lifelines, Safety Harnesses and Fall Arrestors (Lanyards to be attached at all times) when working in elevated positions
- Good housekeeping
- Securing of tools, equipment and material at heights
- Wearing of appropriate personal protective equipment as identified in the risk assessment

Personal Conduct

No person shall act in a manner that endangers or is likely to endanger, the safety of any other person, or cause harm to any other person.

An employee who observes any dangerous situation, shall as soon as possible inform the person who is responsible for that section of the site.

Any employee who becomes aware of any person disregarding any safety rules, shall remind that person of the rules. If he persists in disregarding the rules, the matter must be reported to his supervisor.

No person shall damage, alter, remove, render ineffective or interfere with anything that has been provided for the protection of the site, or for the health and safety of persons.

No person shall interfere with or use firefighting equipment without authority and training.

No person in a state of intoxication or condition that render him incapable of controlling himself shall enter or be allowed to enter the site.

No alcohol or illegal drugs shall be taken onto the site.

All safety and warning signs shall be obeyed.

Always be alert of construction vehicles as well as traffic. Never turn your back to oncoming traffic or construction vehicles / mobile plant, always have a line of sight.

18.4 Sub Service Providers

The Consultant shall establish, maintain and ensure that all his Sub Service Providers establish and maintain HSE standards and systems as necessary and to comply with the Legal requirements as well as these HSE specifications.

18.5 Public Health and Safety

The Consultant shall, as far as is reasonably practicable, 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. During the construction phase of the project, this can be done through the Principal Contractors HSE Officer.

This includes:
- Non-employees entering the site for whatever reason
- The surrounding community
- Passers-by to the site

19. INCIDENT MANAGEMENT

The Consultant shall ensure that a culture exists within his company that promotes the recognition, response, reporting and investigation of incidents, including near misses (near hits). The Consultant must implement a procedure for reporting and investigating accidents, incidents and near misses as prescribed in the General Administrative Regulation, Section 8. The Consultant should have a clear objective and target to obtain zero injuries for the duration of the project and such an objective must be communicated to all employees.

Appropriate corrective actions must be implemented and the applicable learnings must be shared within the Consultants business to prevent a recurrence of the incident or to prevent the minor incidents from becoming serious incidents in future.

19.1 Incidents and Accidents

The Consultant shall investigate all accidents/incidents where employees were injured to the extent that he 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, which must be updated with each accident/indent.

The Consultant shall notify the relevant SANRAL Project Manager and or SANRAL OHS Specialist of any incident / accident within the Consultants area of responsibility in writing as soon as possible.
Although the accident / incident is reported to the client, the Consultant has a responsibility and is required by law to report any Section 24 accidents and incidents to the Department of Labour. Any road traffic accident must be reported to the relevant authorities.

It is essential that the Consultant demonstrate that corrective and preventative action has been taken to prevent a similar incident in future and that it is communicated to all affected employees. A copy of the investigation, corrective and preventative action taken as well as the attendance register of the employees who attended the discussion of the incident and the action implemented to prevent a similar incident, must be forwarded to the SANRAL Project Manager and or the SANRAL OHS Specialist.

In addition to medical treatment cases it is recommended that Near Miss incidents and First Aid cases are also investigated to establish root causes and implement preventative measures.

20. PROJECT SPECIFIC CONSTRUCTION REQUIREMENTS

20.1 Baseline Risk Assessment

The following is a list of risks identified which forms the Baseline Risk Assessment for the project prepared by the Client in terms of Construction Regulation 5(1)(a):

Risks in connection with:

- Working in elevated positions (e.g. Bridge Inspections)
- Working over water environments (e.g. Bridge Inspections)
- Excavation – locating existing underground services, digging test pits
- Manual handling – setting up surveying equipment
- Ergonomic risks
- High & Low voltage power lines – overhead & underground
- Work in close proximity to railway lines
- Uneven ground surfaces
- Personal safety & security risks
- Traffic Control (Ensure Correct Signage at Correct Distances)
- Working from ladders
- Exposure to noise
- Working in close proximity to traffic
- Working with hot materials
- Radio Active equipment
- Hazardous Chemical Substances
- Flammable Materials
- Driving to and from site
- Biological risks e.g. bees, snakes, spiders, etc.
- Environmental risks
  - Bad weather conditions,
    - rain,
    - lightning,
    - wind,
  - poor visibility
  - heat exposure – dehydration
  - cold environments

During the construction phase of the project, the employees of the Consultant must be inducted and trained on the risk assessments and Safe Operating Procedures of the Principal Contractor before entering the site and record of such induction / training must be kept on file, e.g.

- Work in close proximity of Mobile Plant (e.g. Bomag Roller, Pneumatic roller, etc)
- Falling Objects
- Suspended Loads
- Crane Operations
- Asphalting

20.2 Site Attendance Register

All site visitors shall report to security / reception upon arrival at site. All visitors need to sign an attendance register when visiting the site. Visitors include all persons which are not permanently working on the site, but excludes temporary site workers. Visitors must undergo site induction training before they are allowed on site to make them aware of the site dangers. During the construction stage of the project, the HSE Officer of the Principal Contractor should conduct the site induction with visitors before they are allowed on the construction site.

20.3 Personal Protective Equipment

Comply with General Safety Regulations, Section 2

The Consultant shall identify the hazards in the workplace and remove them or, where impracticable, take steps to protect employees and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment (PPE) should, however, be the last resort. The hierarchy of hazard elimination must be followed before the option of personal protective equipment is considered. The following hierarchy of controls must be followed:

- Elimination
- Passive Controls
    - Substitution – Using a cherry picker or man-lift instead of a ladder.
    - Engineering Controls – Installing barrier railings; Installing stairs instead of using vertical ladders.
- Active Controls
    - Administrative policies and procedures
    - Personal protective equipment

Where it is not possible to create an absolutely safe and healthy workplace the Consultant 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 the hazardous environment.

It is a further requirement that the Consultant maintain 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 the use/wear of 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 the employee.

The Consultant shall ensure that all his personnel, excluding those who are permanently office bound, are equipped with reflective safety jackets and that these are worn at all times when working on site. Any person found not wearing a reflective jacket on site must be removed from the site until such time as he is in possession of and wearing a reflective jacket. Reflective safety jackets shall be kept in good condition and any jackets that are ineffective must immediately be replaced by the Consultant.

20.4 Site Security

Certain areas where work must be carried out, is recognized unsafe areas and certain other areas may from time to time become unsafe, due to 3rd party actions. The Consultant must as far as reasonably possible anticipate unsafe areas and must ensure that his site staff is safe from 3rd party actions, which include but is not limited to:

- Unrests,
- Violent Demonstrations,
- Theft,
- Injury from 3rd parties at all times.

The Consultant must, when work is to be carried out in the above-mentioned areas, make provision for security services to accompany site staff during the execution of their work, as the Consultant is responsible for the Health, Safety and Security of his own staff. The provision for security services must form part of the Consultants tender.

20.5 Working in Elevated Positions

Comply with Construction Regulation, Section 10

The Consultant shall ensure that a fall protection plan, developed by a competent person who is designated as the Fall Protection Plan Developer, is available on site and understood by all employees who will be working in elevated positions.

All employees working in elevated positions shall protect themselves from falls by wearing a full body harness and the lanyard shall be attached as far as possible above the head of the employee to a life line or other approved and tested anchor point.

In addition to obvious elevated work activities, work activities which include:

- Working on the edge of an excavation where there is a risk of falling into the excavation;
- Work on the edge of a vertical drop where there is a risk of falling;

- Work on top of trucks and tanks;

Shall be considered work in elevated positions and Section 10 of the Construction Regulations must be adhered to at all times. The hierarchy of controls must be implemented when such activities are carried out. As a minimum the employee must wear PPE, which shall include a full body harness attached to a restraint.

Only suitable ladders that have been inspected and has been certified “safe for use” may be used for elevated work. The top two rungs on the ladder may not be used for elevation, as this will render the ladder unstable. A second person should hold the ladder stable whenever working from it.

20.6 Excavations

Comply with Construction Regulations, Section 13

The Consultant shall ensure that all excavations are carried out under the supervision of a competent person who has been appointed in writing as Excavation Supervisor.

The Consultant must evaluate the stability of the ground before excavation work begins as well as during excavation work.

Excavations must be barricaded to prevent unauthorized access.

Material removed from excavations, as well as heavy machinery and construction vehicles, must not be closer than 1 meter of the edge of the excavation, to prevent additional loads on the excavation edge, which could cause cave-ins, to prevent construction vehicles from falling into the excavation and to prevent the accumulation of carbon monoxide gas inside the excavation.

People working in the excavation must be adequately protected from cave-ins, by means of protection systems such as shoring and bracing and must have a safe means of access into the excavation and egress from the excavation.

20.7 Construction Vehicles

Comply with Construction Regulation, Section 23, National Road Traffic Act, 1996

Construction vehicle operators must have received training to operate the class of construction vehicle or mobile plant and must be in possession of an operator’s card as proof of competency. Construction vehicle operators must be authorised in writing and have a medical certificate of fitness issued by an occupational health practitioner to operate the construction vehicle and/or mobile plant.

20.8 Electrical Equipment

Comply with Construction Regulations, Section 24

The Consultant shall take adequate steps to ascertain the presence of and guard against danger to workers from electrical cables or apparatus which is under, over or on the site.

The exact location of underground electric power cables must be determined before any excavators are used for excavation purposes.

The location of overhead electrical cables must be assessed when working with equipment that has booms that can extent. Injury may be possible from touching the electrical cables with the equipment boom, or from arching when the equipment boom comes too close to the electrical cable.

Electrical machinery and extension cords must be in a serviceable condition and must be inspected before use on the construction site by the authorised operator and the inspection checklist must be kept on the construction site.

20.9 Temporary Storage of Flammable Liquids

Comply with Construction Regulation, Section 25 and General Safety Regulations, Section 4

The Consultant must ensure storage areas of flammable liquids are well ventilated and “No Smoking” signs are placed at the entrances and ventilation ducts of the storage areas. Firefighting equipment must be available in suitable positions around the storage areas.

The Consultant must ensure that good housekeeping is practiced in and around the flammable storage areas.

20.10 Water Environments

Comply with Construction Regulation, Section 26

The Consultant must ensure that a lifejacket forms part of the employees PPE and is worn when the employee is exposed to the risk of drowning, by falling into water.

The risk assessment must make provision for the rescuing of persons in danger of drowning and for preventing employees from falling into the water.

When working over water environments, Section 10 of the Construction Regulations – Fall Protection will also apply.

20.11 Manual Handling / Ergonomic Risks

The Consultant must ensure that the health of his employees are not affected through the handling of heavy equipment and safe lifting techniques are applied by his employees. Manual handling and ergonomic risks must be included in the risk assessments of the Consultant and employees must be aware of it and trained in it.

20.12 Traffic Control

When the Consultant carries out construction related activities on site, during the design stage of the project, sufficient and adequate traffic control must be implemented. Traffic control signage must be displayed and employees must be aware of approaching traffic, facing oncoming traffic at all times.

20.13 Radioactive Equipment

The Consultant, when working with radioactive equipment, must ensure that all appropriate safety measure are implemented, employees are made aware of the dangers of the equipment and the equipment is used according to the manufacturer’s instructions.

20.14 Intoxicating Liquor and Drugs

Comply with General Safety Regulations, Section 2A

The site limit for intoxication is set to zero to complement a vision of zero tolerance

Any person found to be intoxicated, or consuming intoxicating liquor or illegal drugs, must not be allowed onto the premises and/or must be removed from the premises.

The Consultant has the right to test any person entering the premises for intoxicating liquor or illegal drugs and may refuse entrance on the basis of the outcome of the test.

The Consultant shall ensure that employees taking prescription medicine informs the Consultant of such and shall ensure that the side effect of such medicine does not constitute a hazard to the employee himself or people working in close proximity to the employee.

E2: Health and Safety Specification for Contractor during Construction

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

CONTRACT SANRAL X.008-004-2026/1F

SCOPE OF WORKS: CONSULTING ENGINEERING SERVICES FOR THE ROUTINE ROAD MAINTENANCE OF NATIONAL ROUTE R42 SECTION 8 FROM GAUTENG/MPUMALANGA BORDER TO DELMAS, N12 FROM VICTOR KHANYE/EMALAHLENI MUNICIPAL BORDER TO THE GAUTENG/MPUMALANGA BORDER , R555 SECTION 1X FROM GAUTENG/MPUMALANGA BORDER TO VICTOR KHANYE/EMALAHLENI.

TABLE OF CONTENTS **PAGE**

1. NOTE TO PRINCIPAL CONTRACTORS AND CONTRACTORS C3-94
2. PURPOSE C3-94
3. DEFINITIONS AND ABBREVIATIONS C3-94
4. HEALTH AND SAFETY POLICY C3-97
5. ROLES & RESPONSIBILITIES C3-97
6. HSE TRAINING AND COMPETENCE C3-98
7. APPLICATION FOR CONSTRUCTION WORK PERMIT C3-98
8. DUTIES C3-99
9. MANAGEMENT AND SUPERVISION C3-99
10. RISK MANAGEMENT C3-99
11. LEGAL COMPLIANCE & DOCUMENT CONTROL C3-100
12. OPERATIONAL INTEGRITY C3-103
13. OCCUPATION HEALTH & HYGIENE C3-103
14. WASTE MANAGEMENT C3-105
15. HAZARDOUS SUBSTANCE MANAGEMENT C3-105
16. CONTRACTORS C3-105
17. DESIGNING FOR HEALTH, SAFETY AND THE ENVIRONMENT C3-110
18. INCIDENT MANAGEMENT C3-110
19. PROJECT SPECIFIC CONSTRUCTION REQUIREMENTS C3-111

1. NOTE TO PRINCIPAL CONTRACTORS AND CONTRACTORS

The Occupational Health and Safety Act, Act 85 of 1993 and its Regulations together with SANS Codes set out minimum standards with regards to Occupational Health and Safety. The South African National Roads Agency SOC Limited (SANRAL), has developed this Occupational Health and Safety Specifications with these minimum standards in mind and in certain stages the requirements of SANRAL exceeds the minimum legal requirements to follow best practices and to ensure a healthy and safe workplace for all.

SANRAL in no way assumes the Contractors legal liabilities and responsibilities. The Contractor is and remains accountable for the quality and execution of his health and safety programme for his employees. This Health and Safety Specification reflects minimum legal and SANRAL requirements and should not be construed as all encompassing.

It is realized that the Contractor have its own Health and Safety Management system and safe work practices. The intention of this Health and Safety Specification is not to change the Contractors Health and Safety management system, but for the Contractor to use its current Health and Safety management system to draw up a project specific Health and Safety plan according to these specifications as well as to legally comply with the Construction Regulations, GNR.84 of 2014.

It is the responsibility of the Principal Contractor and other Contractors to make themselves conversant and comply with the requirements and conditions contained in the various legislation pertaining to their profession and scope of works at all times.

This document is not exhaustive of all duties imposed by the Occupational Health and Safety Act, Act 85 of 1993 and its Regulations, governing the duties and obligations, of a Designer, Principal Contractor and Contractor performing duties in terms of an agreement with the client (SANRAL). These duties are fully described in the Occupational Health and Safety Act, Act 85 of 1993 and its Regulations and it is the duty of every Designer, Principal Contractor and Contractor to acquaint themselves therewith before commencing work.

Words used herein in the singular shall be deemed to include the plural and male shall include female and vice versa, unless the context otherwise requires.

2. PURPOSE

This document is compiled to ensure that the Principal Contractor and any other Contractors working for SANRAL directly or through a Principal Contractor, are aware of the Occupational Health and Safety requirements when working on a SANRAL contract, as well as to make them aware of their legal liabilities and responsibilities as per the Occupational Health & Safety Act, Act 85 of 1993, and its Regulations.

3. DEFINITIONS AND ABBREVIATIONS

Assessment – An opinion or a judgment about someone or something that has been thought about very carefully.
At-risk behavior – Conduct that unnecessarily increases the likelihood of an injury or incident.
Audit – A systematic and documented review of the effectiveness of implementation of processes, programmes and procedures, based on general process criteria.

Baseline risk assessment – This is the initial assessment of risk in a workplace. It is a broad assessment and includes all activities taking place on site, but does not include risk control measures or safeguards.

CIDB – Construction Industry Development Board
Client – Any organization or person for whom construction work is performed. For the purpose of this document, the client is the South African National Roads Agency SOC Limited.
Communicate – The process of two way dialogue which is understood by both parties.
Competence – A combination of attributes such as knowledge, training, experience and qualifications to assure successful performance.
Competent Person – Means a person who has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No. 67 of 2000), those qualifications and that training must

be regarded as the required qualifications and training; and is familiar with the Act and with the applicable regulations made under the Act.
Consequence – Outcome or impact of an event.
Continual Improvement – A recurring process of enhancing performance to achieve consistent improvements in overall performance.

Contractor – An employer as defined in section 1 of the OHS Act, who performs construction work and includes Principal Contractors and Sub-Contractors.

Construction Work – any work in connection with:

- The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- The construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work.

Corrective Action – An action taken to eliminate the cause of a detected non-conformity or other undesirable situation.

Construction Regulations (CR) – Construction Regulations, GNR. 84 of 2014

Critical equipment – A piece of equipment or a structure whose failure to perform to design specification, has the potential to result in a major accident event.

Design – in relation to any structure, includes drawings, calculations, design details and specifications.

Designer – a) competent person who:

- Prepares a design
- Checks and approves a design
- Arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
- Designs temporary work, including its components

b) an architect or engineer contributing to, or having overall responsibility for a design
c) a building services engineer designing details for fixed plant
d) a surveyor specifying articles or drawing up specifications;
e) a contractor carrying out design work as part of a design and building project; or
f) an interior designer, shop fitter or landscape architect

DMR – Driven Machinery Regulations, GNR. 295 of 26 February 1988

Documents – Structured units of recorded information and its supporting medium (paper or electronic).Most records are documents, but not all documents are records. A document becomes a record when it is part of a business transaction, is kept as evidence of that transaction and is managed within a record-keeping system.

EIR – Electrical Installation Regulations, GNR. 242 of 6 March 2009

Emergency – An abnormal occurrence that pose a threat to the safety or health of employees, customers, or local communities, or which can cause damage to assets or the environment.

Employee – An individual who is employed by or works for an Employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person.

Employer – Any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerates him, but excludes a labour broker as defined in section 1(1) of the Labour Relations Act, 1956 (Act No. 28 of 1956). For the purpose of this document, the employer is the South African National Roads Agency SOC Limited.

EMR – Electrical Machinery Regulations, GNR. 250 of 25 March 2011

Environment – The surroundings or conditions in which a person, animal or plant lives or operates, including air, water, land, natural resources and habitats.

Excavation work – The making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping

GAR – General Administrative Regulations, GNR. 929 of 25 June 2003

GMR – General Machinery Regulations, GNR. 1521 of 5 August 1988

GSR – General Safety Regulations, GNR. 1031 of 30 May 1986

Harm – A significant and or long lasting adverse effect on people, the environment or the community.

Hazard – A source, situation or act with a potential for harm in terms of human injury or ill health.

Health and Safety File – Means a file, or other record in permanent form, containing the information in writing as required by the Construction Regulations, GNR. 84 of 7 February 2014, Section 7(1)(b).

Health and Safety Plan – Means a project specific documented plan in accordance with the client's health and safety specifications, as required by the Construction Regulations, GNR. 84 of 7 February 2014, Section 7(1)(a).

Health and Safety Specification – Means a project specific document prepared by the client pertaining to all health and safety requirements related to construction work, as required by the Construction Regulations, GNR. 84 of 7 February 2014, Section 5(1)(b).

HSE – Health, Safety and Environment. Commonly used in the format HSE.

Incident – Work-related events (including accidents which give rise to injury, ill health, fatality or emergencies) that have resulted in, or has the potential to result in adverse consequences to people, the environment, property, reputation or a combination of these.

Likelihood – A description of probability or frequency, in relation to the chance that something will occur.

Lost Time Injury (LTI) – When a person is injured during the execution of his/her duties and as a result of the injury is unable to perform his/her regular duties for one full shift or more on the day following the day on which the injury has incurred, whether a scheduled work day or not(weekend).

Management System – Management processes and documentation that collectively provide a systematic framework for ensuring that tasks are performed safely, correctly, consistently and effectively to achieve a specified outcome and to drive continual improvement in performance.

Mandatory – An agent, contractor or sub-contractor for work, but without derogating from his status in his own right as an employer or a user.

MSDS – Material Safety Data Sheet

Near Hit / Near Miss – Any occurrence or situation which had the potential for adverse consequences to people, the environment, property, reputation or a combination of these.

Non-conformance – Any deviation from work standards, practices, procedures, regulations that could either directly or indirectly lead to injury or illness, property damage, damage to the environment or a combination of these.

OHS Act – Occupational Health & Safety Act, 85 of 1993

Policy – Statement by an organization of its intentions and principles in relation to its overall performance which provides a framework for action and for the setting of its objectives and targets.

PPE – Personal Protective Equipment

Preventive Action – An action implemented to eliminate the cause of a potential non-conformity or other undesirable potential situation.

Principal Contractor – An employer appointed by the client to perform construction work and who is in overall control and management of a part of or the whole construction site.

Procedure – A specific documented way to carry out an activity or a process.

Records – Recorded information, in any form that is kept as evidence. Records include monitoring results, evidence of training, audits, inspections and calibration reports.

Risk Assessment – A process of evaluating the risk(s) arising from hazards taking into account the adequacy of any existing controls and deciding whether or not the risk(s) is acceptable.

Risk Management – The ongoing treatment of risks through the application of management policies, processes, procedures and risk control measures.

Risk – A combination of the likelihood of an occurrence of a hazardous event or exposure and the severity of injury or ill health that can be caused by the event or exposure.

Root Cause – The cause of the incident that, when rectified, will prevent the recurrence of not just incidents with those exact circumstances, but others with similar causes.

SACPCMP – South African Council for Project and Construction Management Professions

SANRAL - South African National Roads Agency SOC Limited

Supplier – A person or company that supplies material or equipment to a contractor on a construction site, but does not physically carry out construction work on the construction site.

The Act – The Occupational Health and Safety Act No. 85 of 1993

The Site – The area where work is carried out for SANRAL as defined on the front page of this document.

WAH – Acronym for Working at Heights

4. HEALTH AND SAFETY POLICY

Contractors are expected to have their own written Health and Safety Policy. The policy should declare their attitude and approach to the health, safety and welfare of their employees and others. Provision must be made to review the policy annually and the CEO or Managing Director must sign and date the policy to indicate his commitment to ensuring the health and safety of his employees.

5. ROLES & RESPONSIBILITIES

Every Contractor is considered to be an employer in his own right and shall comply with all legal requirements pertaining to an employer, which include the responsibility to provide as far as reasonably practicable a safe and healthy working environment for his employees, as per Section 8 of the OHS Act.

In conjunction with Section 8 of the OHS Act, all employees on the project are responsible for their own safety as well as the safety of persons who may be affected by their acts, as per Section 14 of the OHS Act. It is the responsibility of each employee to ensure that he acts in a safe manner before, during and after work is carried out.

The contractor shall ensure that where required by the OHS Act and Regulations, competent employees are appointed in writing. These appointments must be project / contract specific and specific to the tasks that will be performed. Every appointment must display the duties of the person appointed and training certificates from a registered training provider must be attached to such appointment (where applicable). A list of possible appointments can be found in section 11.1 below.

6. HSE TRAINING AND COMPETENCE

Where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No. 67 of 2000), those qualifications and training must be regarded as the required qualifications and training and employees must have attended courses of the aforementioned nature to be considered competent in the task.

All employees that forms part of the construction work must be trained and competent. Employees formally appointed to perform a certain duty must be in possession of a training certificate, received from a registered

training provider. All employees must as a minimum have received site specific safety induction training and must receive daily safe task instruction training (DSTI) before any work commences.

Training Needs – There shall be a system in place to determine the training requirements of each individual, based on the tasks that the employee will perform as well as to ensure the health and safety of fellow employees and the public. Special attention should be given to employees who are new hires, new to the task or have combined responsibilities.

Basic Safe Work Training (Induction Training) – Every contractor shall ensure that his employees are inducted into his own company Health and Safety System as well as basic safe work training (HSE Induction Training). The Principal Contractor shall ensure that his, all his Sub-Contractor employees and visitors are inducted on the specific site safety procedures.

A Daily Safe Task Instruction (DSTI) must be conducted on site with all employees involved in the project. The DSTI must be carried out each day before work commences and proof thereof must be available on site. Each work crew may conduct their own specific DSTI to discuss the hazards, risks and control measures associated with their task for the day.

Where two or more contractors or work crews work in the same area, they should have a combined DSTI to ensure they know of the additional hazards the other contractor or work crew will introduce to their operations and what precautions to put in place.

The contractor shall have evidence that employees have been trained on the relevant procedures prior to and during the project duration.

Formal Training – All qualifications for which there are SAQA registered training courses, must be regarded as the minimum required qualifications and training. To be deemed “competent” an employee must have received training at a registered training provider, the training course must be registered and if there is an assessment, the employee must have been found competent after the assessment. A person cannot be deemed competent after awareness training only.

The Contractor shall ensure that his employees, as well as the employees of any sub-contractors that may be used, have received appropriate training for the type of work that will be performed, e.g. First Aid, Flag Man, Mobile Plant Operator, Working at Heights, Risk Assessment training etc.

Records – Record of all training shall be kept by the employer and shall be readily available. Records shall make provision for refresher training where applicable. Where an employee is legally appointed with certain duties and responsibilities a copy of the training certificate must be attached to the appointment.

7. APPLICATION FOR CONSTRUCTION WORK PERMIT

Construction Regulation, 2014 Section 3 requires that the client apply for a construction work permit at least 30 days before construction work is started, if the intended construction work is of a value exceeding forty million rand or CIDB grading level 8 and will start on or after 7 February 2017. If approved, the provincial director will issue a construction work permit in writing to perform construction work within 30 days of receiving the application and assign a site specific number for the construction site. It is the intention of SANRAL to apply for a construction work permit as soon as the Contractor is appointed and his Health and Safety Plan is received, in order to minimize construction delays.

The site specific construction work permit number must be displayed at the main entrance to the site and a copy of the construction work permit must be kept in the principal contractors health and safety file for inspection purposes.

8. DUTIES

Various duties are imposed on the client, designer, principal contractor and other contractors by the Construction Regulation, 2014, Sections 5, 6 & 7. SANRAL will comply and carry out the required duties as contemplated in section 5 of the Construction Regulations, 2014 and it is expected from the designer and every contractor to make themselves conversant with the requirements and duties imposed on them and to ensure that they comply with the requirements of section 6 & 7 at all times.

9. MANAGEMENT AND SUPERVISION

The contractor shall ensure that the project is managed safely and legal compliance is ensured at all times.

A full-time competent person must be appointed as a Construction Manager to manage all construction work, including health and safety compliance. The construction manager may not be appointed to manage more than one single construction site.

The construction manager must appoint construction supervisors responsible for construction activities and ensuring occupation health and safety on the construction site.

The contractor must appoint a full-time or part-time construction health and safety officer, who is registered with the SACPCMP, to assist in the control of health and safety aspects on site.

10. RISK MANAGEMENT

The Contractor must follow a formal risk based approach to ensure hazard control measures are implemented to an acceptable reasonable practical level. The contractor and his employees shall be responsible to ensure all hazards pertaining to his scope of activity are proactively identified, the risks assessed and appropriately eliminated or minimized and managed on an ongoing basis. Risk assessments shall also identify possible and potential environmental, health and hygiene issues pertaining to each hazard with potential exposures and limits.

a) Hazard Identification and Risk Assessment (Construction Regulation 9)

i. Development of Risk Assessments

The contractor shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, conduct a risk assessment by a competent person, appointed in writing and the risk assessment so produced shall form part of the OH&S plan and be implemented and maintained as contemplated in Construction Regulation 9(1). Competence is a factor of training, knowledge, experience and/or appropriate qualifications.

The risk assessment shall include, as far as is reasonably practicable, at least:

- The task or task step
- the identification of the risks and hazards to which persons may be exposed during the task or task step;
- the analysis and evaluation of the risks and hazards identified, inclusive of a residual risk rating methodology. The method to be used is not prescribed;
- a documented plan of safe work procedures, to mitigate, reduce or control those residual risks that have been identified as unacceptably high, by means of the rating system;
- a monitoring plan;
- a review plan, inclusive of dates to be adhered to; and
- ergonomic related risks are to be analysed, evaluated and addressed as part of the process.

Based on the risk assessments, the 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 assessments, together with the site-specific OH&S rules shall be submitted to the Employer before construction on site commences. SANRAL has conducted a Baseline Risk Assessment as per 11.1 below, which must be used by the contractor to develop task specific risk assessments before work commences. This does not mean that all possible Risk Assessments must be attended to before work commences, but that all relevant Risk Assessments receive the necessary attention as the contract progresses, and this is the responsibility of the contractor.

All variations to the scope of work shall similarly be subjected to a risk assessment process.

b) Risk Assessment Monitoring

The contractor shall ensure that a monitoring plan for all risk assessments are in place. Risk assessments must be monitored to ensure effectiveness and employee understanding. The

monitoring of risk assessments shall be formal and records thereof shall be available for audit purposes.

c) Review of Risk Assessment

The contractor shall review the hazard identification, risk assessments and standard safe working procedures prior to any work activity commencement and 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 contractor shall provide the Employer, sub-contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated above.

Activities carried out without conducting a risk assessment or found to be non-compliant with the risk assessment, will be stopped until such time a risk assessment is compiled and work is carried out according to the risk assessment.

Risk assessments must be fully communicated to all relevant personnel and must be considered when establishing training, awareness and competency requirements.

10.1 Baseline Risk Assessment

SANRAL will prepare a Baseline Risk Assessment from which the Health and Safety Specifications for the project will be prepared. The Baseline Risk Assessment will highlight all work for which the Contractor must prepare safe work procedures and or work method statements. In this case the Baseline Risk Assessment will not identify risks or control measures, this must be identified by Contractor when preparing the Issue Based Risk Assessments.

The Baseline Risk Assessment for this Project can be found on page 17 section 19.1 of this document.

10.2 Continuous Risk Assessment

The Contractor shall continuously assess the risks of the activities that are carried out. Risk assessments must be in writing, site specific and must be reviewed continuously to ensure it is current and it address all the relevant hazards and risks associated with the specific activity at the specific site.

The Risk assessment must be discussed with the whole work crew before the activity starts and the work crew must acknowledge in writing having discussed the risk assessment and that they understand it. This acknowledgement must be on site and must be available to the client for audit purposes.

11. LEGAL COMPLIANCE & DOCUMENT CONTROL

The contractor is required to implement systems and procedures to ensure legal compliance through:

- Identification of all relevant HSE legislation, standards and codes applicable to its operations.
- Have available copies of all relevant HSE legislation, standards and codes for reference purposes.
- Update legislation, standards and codes with any changes
- Communicate to all employees any changes that may affect their accountabilities and conformances
- Incorporate any legal requirements into their HSE management system
- Monitor and review their HSE management system for effectiveness.

The contractor shall, as a minimum, comply with:

- The Occupational Health and Safety Act and Regulations (Act 85 of 1993), an up-to-date 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 Mine Health and Safety Act, 1996 (Act No. 29 of 1996), and its regulations and any other OH&S requirements that the mine may specify. An up-to-date copy of the Mine Health and Safety Act and its regulations shall be available on site at all times.

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 contractor shall be conversant with and shall comply with these regulations.

11.1 Legal Appointments

All legal appointments of the Contractor regarding the Health and Safety of his employees who are to work on the project are addressed and governed by the OHS Act and applicable Regulations. Legal appointments must be in place and must reflect in the project safety file before work commences.

i. Overall Supervision and Responsibility for OH&S

SANRAL will appoint the Principal Contractor in terms of Construction Regulation 5(1)(k). A Mandatory agreement as per Section 37.2 of the OHS Act, shall be signed between SANRAL and the Principal Contractor.

It is a requirement that the Principal Contractor, when he appoints other contractors in terms of Construction Regulations 7(1)(c), 7(1)(d), 7(1)(f) and 7(3) includes in his agreement with such Contractors the following:

- OH&S Act (85 of 1993), Section 37(2) agreement: “Agreement with Mandatory”
- OH&S Act (85 of 1993), Section 16(2) appointee(s) as detailed in his/her/their respective appointment forms. (Where applicable)

The signed Manadatory agreements shall be placed in the project file for reference and for audit trail purposes.

ii. Specific Supervision Responsibilities for OH&S

The contractor shall appoint designated competent employees and/or other competent persons as required by the OHS Act and Regulations, as well as this specification. 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 to and agreed with the appointees. Where applicable, the training certificate must be attached to the appointment. Notice of appointments shall be submitted to the Employer. All changes shall also be communicated to the Employer.

Below is a list of possible appointments for the project, which is not an all-inclusive list, but for reference purposes only:

Appointment	**Legal Reference**
Assistant to CEO	OHS Act 16(2)
Health and Safety Representative	OHS Act 17(1)
Nominated Health and Safety Committee Member	OHS Act 19(3)
Contractor (Sub-contractor)	CR 7(1)(c)(v)
Construction Manager & Alternate Construction Manager	CR 8 (1)
Assistant Construction Manager	CR 8(2)
Health and Safety Officer	CR 8(5)
Construction Supervisor	CR 8(7)
Assistant Construction Supervisor	CR 8(8)
Risk Assessor	CR 9(1)
Fall Protection Plan Developer	CR 10(1)(a)
Structure Inspector	CR 11(2)(a)
Temporary Works Designer	CR 12(1)
Temporary Works Supervisor	CR 12(2)
Excavation Supervisor	CR 13(1)(a)
Demolition Supervisor	CR 14(1)
Competent Person in the use of Explosives	CR 14(11)
Scaffold Supervisor	CR 16(1)
Suspended Platform Supervisor	CR 17(1)
Rope Access Supervisor	CR 18(1)(a)
Material Hoist Inspector	CR 19(8)(a)

Appointment	Legal Reference
Bulk Mixing Plant Supervisor	CR 20(1)
Explosive actuated fastening device Inspector	CR 21(2)(b)
Explosive actuated fastening device cartridge Controller	CR 21(2)(g)(i)
Construction Vehicle & Mobile Plant Operator Authorised	CR 23(1)(d)(i)
Temporary Electrical Installation Controller	CR 24(c)
Stacking and Storage Supervisor	CR 28(a)
Fire Equipment Inspector	CR 29(h)
Incident investigator	GAR 9(2)
Lifting tackle inspector	DMR 18(10)(e)
Ladder inspector	GSR 13(a)
Certified Explosives Manager	ER 12(1)
First Aider GSR	GSR 3(4)
Hazardous Chemical Substance Supervisor	

In addition to the above, the Employer requires that a Traffic Safety Officer be appointed.

It is a requirement that the contractor shall provide the Employer with an organogram of all sub-contractors that he/she has appointed or intends to appoint and keep this list updated and prominently displayed on site.

iii. Designation of OH&S Representatives (Section 17 of the OH&S Act)

Where the contractor employs more than 20 persons (including the employees of sub-contractors) he has to appoint 1 (one) OH&S representative for every 50 employees or part thereof. This is a minimum (legal) requirement. The contractor may at his own discretion appoint more OH&S representatives according to site specific requirements. General Administrative Regulation 6 requires that the appointment or election of the OH&S representatives be conducted in consultation with employee representatives or employees (Section 17 of the Act and General Administrative Regulation 6 & 7). OH&S representatives shall be designated in writing and the designation shall include the area of responsibility of the person and term of the designation. OH&S representatives must be experienced, permanently employed by the contractor or his sub-contractors, trained and able to move freely within their designated area of responsibility.

iv) Duties and Functions of the OH&S Representatives (Section 18 of the OH&S Act)

The contractor shall ensure that the designated OH&S representatives perform their functions in respect of the workplace or section of the workplace for which they have been appointed. These functions include: conduct continuous monitoring and monthly inspections of their respective areas of responsibility, focusing on unsafe acts and unsafe conditions and report thereon to the contractor. OH&S representatives shall participate in accident or incident investigations. OH&S representatives shall attend all OH&S committee meetings. The complete list of functions can be found in Section 18 of the OHS Act.

v) Appointment of OH&S Committee (Sections 19 and 20 of the OH&S Act)

The contractor shall establish an OH&S committee, which shall meet at least once a month, where two or more Health and Safety Representatives have been appointed. OH&S representatives must be appointed as OH&S committee members. The number of management appointed members may not exceed the number of OH&S representatives on the committee.

12. OPERATIONAL INTEGRITY

The operational integrity of plant, equipment, structures and protective systems must be monitored and assured on an ongoing basis throughout the project cycle. Hazards must be identified, assessed and as far as reasonably practicable, eliminated or the risks treated to as low as reasonable practicable (ALARP).

12.1 Plant & Equipment Integrity

12.1.1 Construction Plant & Equipment

The Contractor shall maintain all items of plant and equipment necessary to perform the work in a safe condition.

SANRAL reserves the right to inspect items of plant and equipment brought to site and used on site by the contractor. Should it be found that any item is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, the contractor will be advised of such observation / inspection, and the contractor shall be required to repair, make safe or remove such item from operation and replace it with a safe and adequate substitute.

The contractor shall ensure that all plant, equipment, and power tools that are brought onto and used on site are:

- Appropriate for the type of work to be performed
- Placed on a register and inspected by a competent person or the authorized operator before use, daily or monthly dependent on Legislation and project requirements.
- Record inspection findings on a register that must be kept on site.
- The inspection register shall reflect the serial number of the plant, equipment or power tool.
- Maintained and used in accordance with the manufacturers recommendations
- Have adequate machine guarding fitted to all exposed rotating or moving parts, as reasonably practicable, that have the potential to cause harm
- All electrical power supply units are protected with operational earth leakage devices.
- Any defective, damaged or sub-standard equipment must be marked as unsafe for use and removed from operation as soon as possible

12.1.2 Standards and Registers

As standard project procedures, the contractor is expected to:

- Set up an initial set of registers as per the requirements of the OHS Act and Regulations.
- Complete the registers for each piece of plant, tool and equipment brought on and used on site
- Maintain a complete, continuous and comprehensive inspection and service history in these registers or checklists
- Ensure daily, weekly, monthly inspections are done and recorded for all plant, tools & equipment by a competent person as required by the OHS Act and Regulations.
- Have the inspection and maintenance records available for audit purposes.

13. OCCUPATION HEALTH & HYGIENE

13.1 Medical Fitness for Duty

All contractor employees shall undergo medical examinations and be certified fit for duty by an Occupational Health Practitioner before they are allowed to work on site.

The medical certificate must be in the form of Annexure 3 of the Construction Regulations and stipulate the possible exposures the employee might be exposed to during the execution of the project.

It is recommended and in the best interest of the Contractor to implement pre-employment as well as exit medical surveillance, especially with regards to Section 8 of the Noise Induced Hearing Loss Regulation.

13.2 First Aid

According to GSR 3(4), where more than 10 employees are employed at a workplace / worksite, the Contractor shall ensure that there is at least one trained first aider for every group of 50 employees at the workplace / site. First Aid boxes must be provided where more than 5 employees are employed and must be readily available and accessible for the treatment of injured persons at the workplace.

To ensure immediate treatment of an injured person, it is recommended that all work crews have at least one trained first aider, with a fully stocked first aid box, irrespective of the number of people in the work crew. This is especially important when contractors work at great distances from the nearest emergency facility or town. These persons shall be appointed in writing as the first aiders with their certificates attached as proof of competency.

The minimum contents of the first aid box shall be as per the supplied list in the General Safety Regulations.

All treatments done must be recorded on a register and kept with the first aid box. A trained and appointed first aider must be responsible for the first aid box and its content. Used content must be replenished as soon as possible.

In order to ensure prompt response at the emergency facility it is recommended that the W.Cl 2 forms be partially completed with the employers' details.

13.3 Hygiene Facilities

The Contractor shall ensure compliance to Section 30 of the Construction Regulations with regards to facilities on the construction site as well as where accommodation is provided to employees on remote sites. The contractor shall ensure that the facilities are kept clean at all times, either through a service provider or self-employed persons.

13.4 Health related Epidemics and Pandemics

The contractor shall, as far as reasonably practicable describe in his health and safety plan how health related epidemics and pandemics will be dealt with. The employer is aware that this section in the health and safety plan will not speak to specifics, but generic procedures. The Contractor must ensure that the requirements stipulated in the Hazardous Biological Agents (HBA) Regulation are adhered to and in particular the following as described in the mentioned Regulation:

- Risk Assessment and risk assessment reviews;
- Prevention measures;
- Response measures;
- Employee training / information sharing;
- Employee health monitoring;
- Management of infected persons;
- Isolation rooms;
- Employee transportation;
- Employee accommodation;
- Eating facilities;
- Meetings / toolbox talks / Daily safety talks;
- Cleaning of offices / facilities;
- Duties of person that may be exposed to HBA's
- Monitoring exposure at the workplace
- Medical surveillance of employees
- Keeping of records
- Personal Protective Equipment and facilities
- Maintenance of control measures and facilities

Once the nature and scale of the epidemic or pandemic is known, the Contractor must update his health and safety plan with the relevant information and send the updated plan to the relevant appointed OHS Agent for approval. Once approved, the Contractor must implement the updated health and safety plan and maintain the updated plan on site.

14. WASTE MANAGEMENT

The contractor shall comply with all applicable and relevant Waste management legislation, as well as municipal bylaws applicable to waste management.

The contractor shall remove all waste generated at the construction site on a daily basis or as soon as possible after generation to ensure good housekeeping at all times. The contractor shall have a waste management plan which must be implemented on the construction site and which will have the objective to ensure that waste is managed according to the Waste Management Hierarchy:

- Reduce what you can. If you cannot reduce then,
- Re-use what you can. If you cannot re-use then,

- Recycle what you can. What you cannot recycle,
- Convert into energy sources. If it cannot be converted to an energy source,
- Dispose of in a landfill – this is only to be done as a last resort and disposed without endangering human health and without using processes or methods which could harm the environment.

15. HAZARDOUS SUBSTANCE MANAGEMENT

The contractor shall ensure that hazardous substances brought onto site are easily identifiable and stored according to the requirements of the General Safety Regulations, GNR. 1031 of 1986, Section 4.

Where flammable liquids are being used or stored, this must be done in a manner which would not cause a fire or explosion hazard.

The contractor shall have Material Safety Data Sheets (MSDS) readily available for flammable, hazardous and toxic chemical substances and materials brought onto site and shall ensure that his employees are trained in these MSDS's.

Flammable, hazardous or toxic chemical substances may not be stored in empty food or drink containers. Empty flammable, hazardous and toxic containers must be disposed of in a safe manner, which will prevent further use of such a container.

Asbestos

A survey of the construction site must be done during site establishment, to locate any asbestos. Should asbestos be located, the conditions of the Asbestos Regulations, GNR. 155 of 2002 must be followed and complied with.

16. CONTRACTORS

16.1 Consultations, Communications and Liaison

OH&S liaison between the Employer, the contractor, the subcontractors, the designer and other concerned parties will be through the OH&S committee. In addition to the above, communication may be directly to the Employer 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 construction managers and supervisors, OH&S representatives and the OH&S committee. The contractor shall be responsible for the dissemination of all relevant OH&S information to the subcontractors e.g. design changes agreed with the Employer and the designer, instructions by the Employer and/or his/her agent, exchange of information between subcontractors, the reporting of hazardous/dangerous conditions/situations etc. The contractors' most senior manager on site shall be required to attend all OH&S meetings.

16.2 Operational Procedures

Each construction activity shall be assessed by the 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 contractor:

- to be conversant with all relevant Regulations;
- to comply with their provisions;
- to include them in his OH&S plan where relevant

16.3 Checking, Reporting and Corrective Actions

i. Monthly Audit by Employer (Construction Regulation 5(1)(o)

The Employer will conduct monthly health and safety and document verification audits in compliance with Construction Regulation 5(1)(o) in order to ensure that the contractor has implemented and is maintaining the agreed and approved OH&S plan.

ii. Other Audits and Inspections by the Employer

The Employer reserves the right to conduct other ad hoc audits and inspections as deemed necessary. This will include site safety walks.

iii. Contractor's Audits and Inspections

The contractor must conduct his own regular internal audits to verify compliance with his own OH&S management system, as well as with this specification. The contractor shall furthermore ensure that each subcontractor`s health & safety plan is being implemented by conducting periodic audits at intervals mutually agreed between the contractor and subcontractors, but at least once per month.

iv. Inspections by OH&S Representatives 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.

v. 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.

16.4 Project Health and Safety Management Plan

As per Section 5(1)(l) and Section 7(1)(a) of the Construction Regulations of 2014, the contractor shall develop, implement and administer a Health and Safety Management Plan. The plan shall be in writing and shall be negotiated between the Contractor and SANRAL or designated OHS Agent and must be approved by SANRAL or the designated OHS Agent prior to the commencement of work on site. The plan shall demonstrate management's commitment to ensure employee health and safety as their primary objective during the contract. As a suggestion, the following elements may be used to develop the H&S plan:

Introduction
- Mission
- Purpose & Scope
- Health, Safety and Environmental Policy
- Health, Safety and Environmental Goals
- Plan Objectives

Leadership and Commitment
- Values supporting commitment
- Roles, Responsibilities and Accountability

Hazard and Risk Management Process
- Effective Consultation
- Planning

Contractor HSE Alignment
- Sub-Contractors
- On-Site

Learning and Competency
- Project HSE Training and Competency Requirements
- Contractor & Sub-Contractor Duties
- Minimum Training Requirements
- Medical and Induction
- Employee details
- Visitors to site
- Induction

Involvement, Communication and Motivation
- Health & Safety Meetings
- Health & Safety Behaviour
- Information and Learning

Hazard and Risk Management on site
- Hazardous Activities
- Hazardous Areas
- Hierarchy of Hazard Control
- Hazard and Risk Identification
- Risk Analysis and Evaluation
- Documented safe work procedures for hazardous activities
- Hazard and Risk monitoring plan
- Hazard and Risk review plan

Occupational Health and Hygiene
- Fitness for Work
- Hazardous Substances
- Airborne Chemical Substances
- Noise and Vibration
- Personal Hygiene
- Protection of Outdoor Workers
- Occupational Health Services on Site

Performance Tracking and Accountability
- Positive Performance Indicators
- Workplace Observations and Audits
- Reporting

Incident Management
- Emergency Preparedness and Response
- Incident Management
- Injury Management

Waste Management
- Hazardous Waste
- Non Hazardous Waste - Recyclable
- Non Hazardous Waste – Non recyclable

16.5 Project Health and Safety File

The contractor shall compile a project specific Health and Safety File that consist of all the relevant project specific documentation. The Health and Safety file may consist of multiple files, which when combined should contain all the required documentation.

It is recommended that the project specific Health and Safety file contain at least the following:

- Scope and summary of the project as well as any scope changes.
- Notification of Construction Work to DoL / Copy of Work Permit
- Proof of COID registration (Letter of Good Standing)
- Contractor Health and Safety Policy statement signed by management, as well as any other relevant Health and Safety Policies e.g. Smoking Policy, Cell Phone use Policy
- Appointment of Contractor and Mandatory Agreement – OH&S Act 37.2 (Between Employer and Principal Contractor)
- Signed Client Health and Safety specification
- Latest copy of the OHS Act and relevant Regulations
- Company Organogram depicting Health and Safety Responsibilities, including sub-contractors
- Employee list including copy of IDs and medicals
- Project specific Health and Safety Management Plan agreed with the Employer – See point 16.4 above
- Relevant OH&S Legal appointments which includes duties and responsibilities as well as competencies (training certificate)
- Minutes of meetings - OH&S committee and other relevant OH&S meeting agenda templates
- Site specific Fall Protection Plan (if applicable)
- Risk Assessments, Work Method Statements / Safe Operating Procedures
- Contractor Induction material
- List of toolbox talks
- Waste management Plan
- Emergency preparedness (first aid, firefighting, emergency plan, etc.)
- Incident Investigation Procedure

- Emergency Contact Telephone numbers
- HIV awareness program
- List of hazardous chemical substances to be used on site
- Material Safety Data Sheets of hazardous chemicals on site
- List of plant & equipment to be used on site
- Templates of Inspection Checklists/Registers of plant & equipment and emergency equipment
- List of Sub-contractors including type of work
- Sub-contractor 37.2 Mandatary Agreements
- Sub-contractor appointments which shall include the type of work the contractor is appointed for.

At the end of the project, the Principal Contractor shall hand over a consolidated health and safety file to the client (SANRAL) which shall include all the above-mentioned documents, as well as the following:

- Client Health and Safety Audits
- Department of Employment and Labour Inspections
- Internal audits conducted
- Audits conducted on sub-contractors
- Health and Safety Statistics
- List and records of Incident Investigation Reports
- Record of designs, drawings and materials used in the structure [Construction Regulation 7(1)(e)]
- Final structural reports [CR 6(1) (i)]
- Attendance register of people inducted
- List of toolbox talks, copies of discussions and attendance registers
- Copies of minutes of meetings - OH&S committee and other relevant OH&S meeting minutes
- Completed Inspection Checklists/Registers of plant & equipment and emergency equipment
- Health and safety files of any other contractors used on site.

16.6 Contracting Philosophy

Any site specific hazards and safety management expectations will be made known to the Contractor prior to the work commencing on site. Legal OHS requirements contained in the OHS Act and Regulations as well as SANS Codes are the minimum requirements the Contractor must apply and enforce during this contract with regards to Occupational Health and Safety. In addition, the Contractor shall apply, implement and enforce these health and safety specifications as required SANRAL.

16.7 Workers Compensation Registration

The Contractor shall ensure that his employees are covered for any occupational injuries and illnesses in terms of the Occupational Injuries and Diseases Act 130 of 1993, which cover shall remain in place and up to date for the duration of the project.

16.8 HSE Non-Compliance

It is a legal duty of the client according to the Construction Regulation 5(1)(q) that a contractor is stopped from executing any activity which poses a threat to the health and safety of persons. Depending on the seriousness of the non-compliance only the specific activity may be stopped until the non-compliance is rectified or the whole operation may be stopped.

It is also the duty of every employee to take reasonable care of his own health and safety and of other persons who may be affected by his acts as per OHS Act, Section 14(a). Keeping this in mind, it is required of the contractor to ensure his employees has the right to remove themselves from any unsafe situation or work activity, without any negative consequence to them until such time as the contractor has made the unsafe situation or activity as safe as practicable possible.

16.9 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 caused by:
  i. 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; or
  ii. all or any of the Contractor’s suppliers’ difficulty or impossibility to deliver goods or materials needed to perform the Works;
(b) any unlawful, riotous or disorderly conduct by or amongst the Contractor’s personnel.”

16.10 Contractor Conduct

Guidelines to the most important rules that shall be implemented and maintained by the Contractor:

- Complete compliance to the OH&S Act and Regulations
- Hazard identification and Risk Assessments for all activities
- Daily communication of DSTI talk before work commences
- Safe access and egress to and from work areas.
- Compulsory use of lifelines, Safety Harnesses and Fall Arrestors (Lanyards to be attached at all times)
- Scaffold shall comply with Legal and SANS standards at all times
- Good housekeeping and stacking practices
- Safe lifting, rigging and slinging practices
- Complying to Legal standards for lifting machinery & equipment
- No lifting in wind conditions exceeding 30km/h (This is a guide and is dependent on risk assessments)
- Securing of tools, equipment and material at heights
- Wearing of appropriate personal protective equipment as identified in the risk assessment

Personal Conduct

Supervisors in charge are responsible for ensuring that the employees are aware of the hazards / risks involved in the work they will be doing / are doing and shall ensure the safety rules are obeyed.

No person shall act in a manner that endangers or is likely to endanger, the safety of any other person, or cause harm to any other person.

An employee who observes any dangerous situation, shall as soon as possible inform the person who is responsible for that section of the site.

Any employee who becomes aware of any person disregarding any safety rules, shall remind that person of the rules. If he persists in disregarding the rules, the matter must be reported to his supervisor.

No person shall damage, alter, remove, render ineffective or interfere with anything that has been provided for the protection of the site, or for the health and safety of persons.

No person shall interfere with or use firefighting equipment without authority and training.

No person in a state of intoxication or condition that render him incapable of controlling himself shall enter or be allowed to enter the site.

No alcohol or illegal drugs shall be taken onto the site.

All safety and warning signs shall be obeyed.

Always be alert of construction vehicles as well as traffic. Never turn your back to oncoming traffic, always have a line of sight.

16.11 Contractor and Sub-Contractor Management

The Principal Contractor shall establish, maintain and ensure that all his contractors establish and maintain HSE standards and systems as necessary and to comply with the Legal requirements as well as these HSE specifications.

The Contractor shall be solely responsible for carrying out work on the project, having the highest regard for the health and safety of his employees and people in the vicinity of his work area.

16.12 Public Health and Safety

The contractor shall, as far as is reasonably practicable, 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

17. DESIGNING FOR HEALTH, SAFETY AND THE ENVIRONMENT

Designing for safety is a process aimed at minimizing injury, death, property damage or destruction and harm to the environment, by utilizing an approach to identify and eliminate or control hazardous areas. The project Designer and Contractor must implement a process that ensures safety is incorporated in the design process, which includes temporary works as contemplated in the Construction Regulations, 2014 Section 12.

The Contractor must communicate the anticipated risks and hazards resulting from the design to his employees and establish safe work procedures for the temporary works.

18. INCIDENT MANAGEMENT

The Contractor shall ensure that a culture exists within his company that promotes the recognition, response, reporting and investigation of incidents, including near misses (near hits). The Contractor must implement a procedure for reporting and investigating accidents, incidents and near misses. The Contractor should have a clear objective and target to obtain zero injuries for the duration of the project and such an objective must be communicated to all employees.

Appropriate corrective actions must be implemented and the applicable learnings must be shared within the Contractors business to prevent a recurrence of the incident or to prevent the near miss from becoming an incident in future.

1.2 Incidents and Accidents

The contractor and his subcontractors shall coordinate their investigation of all accidents/incidents where employees and non-employees were injured to the extent that he 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, which must be updated with each accident/indent.

The Contractor shall notify the relevant SANRAL Project Manager and or SANRAL OHS Specialist of any incident / accident within the Contractors or his Sub-Contractors area of responsibility in writing as soon as possible.

Although the accident / incident is reported to the client, the Contractor has a responsibility and is required by law to report any Section 24 accidents and incidents to the Department of Labour. Any road traffic accident must be reported to the relevant authorities.

It is essential that the Contractor demonstrate that corrective and preventative action has been taken to prevent a similar incident in future and that it is communicated to all the Contractors affected staff. A copy of the investigation, corrective and preventative action taken as well as the attendance register of the employees who attended the discussion of the incident and the action implemented to prevent a similar incident, must be forwarded to the SANRAL Project Manager and or the SANRAL OHS Specialist.

Investigations must be completed for:

- Near Miss Incidents (To prevent it from becoming an incident)
- First Aid case Incidents
- Medical treatment case Incidents
- Fatalities

18.2 Incident Reporting

The contractor shall provide the Employer with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring. In addition, the contractor shall update monthly the Disabling Injury Frequency Ratio (DIFR) and display this information on a signboard at the site office.

The Contractor is responsible for collecting, recording, calculating and reporting his and his sub-contractors Health & Safety statistics to the SANRAL OHS Specialist.

The statistics should contain at least the following for all employees of all contractors working on the project:

- Total Number of workers

- Total Number of hours worked (on the SANRAL project)
- Total Number of Near Miss Incidents
- Total Number of First Aid case Incidents
- Total Number of Medical Treatment case Incidents (Excluding Section 24 type incidents)
- Total Number of Section 24 type Incidents
- Preventative actions taken on incidents that have occurred
- Communication to employees and contractors of incidents and preventative actions.

19. PROJECT SPECIFIC CONSTRUCTION REQUIREMENTS

Section 1 to 18 of this document is generic and is applicable to all projects carried out on behalf of the South African National Roads Agency SOC Ltd.

The following section contains specific requirements for Contract SANRAL X.008-004-2026/1F which must be adhered to in addition to minimum legislative requirements.

1.2 Baseline Risk Assessment

The following is a list of risks identified which forms the Baseline Risk Assessment for the project prepared by the Client in terms of Construction Regulation 5(1)(a):

Risks in connection with:

- Personal health risks in connection with ablution facilities, eating areas, drinking water.
- Secure/safe storage of materials, plant and equipment
- Secure/safe storage and use of hazardous and/or flammable materials
- Maintenance workshop - onsite repairs to construction vehicles, mobile plant & equipment.
- Possibility of asbestos in existing structures
- Existing services, e.g. gas, telecommunications, electrical supply and similar
- Temporary electrical installations
- 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/her work activities)
- Biological hazards, e.g. bees, snakes, spiders
- Environmental risks, e.g. lighting, strong winds, heavy rains, dark environments, hot/cold and wet environments
- Exposure to a water environment
- Exposure to noise
- Exposure to vibration
- HIV/Aids and other diseases such as silicosis or asbestosis, where applicable
- Hazardous Biological Agents which could lead to epidemics and pandemics
- Use of portable electrical equipment including, but not limited to:
  - Angle grinder
  - Electrical drilling machine
  - Circular saw
  - Generator
- Excavations including, but not limited to:
  - Ground/soil conditions
  - Trenching
  - Shoring
  - Drainage of trenches
- Welding including, but not limited to:
  - Arc welding
  - Gas welding
  - Flame cutting
  - Use of LP gas torches and appliances
- Loading and off-loading of trucks, including material deliveries
- 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
  - Grader
  - Parking of vehicles and mobile plant
  - Towing of vehicles and mobile plant
- Layering and bedding
- Installation of pipes in trenches
- Pressure testing of pipelines
- Backfilling of trenches
- Protection against flooding
- Gabion work
- Use of explosives
- Overhead Electrical Cables
- Work adjacent or in proximity of railway lines
- Work adjacent or in proximity of traffic
- Working in elevated positions
- Working in confined spaces – tunnelling
- Formwork and support work (temporary works) including scaffolding
- Demolition work, where applicable
- Bulk mixing plant, where applicable
- Environmental impacts such as pollution of water, air or soil

19.2 Daily Site Attendance Register

The Contractor shall keep a daily site register so as to be able to identify the entire Contractors personnel on site in case of an emergency or evacuation situation. The attendance register must include permanent as well as temporary workers working on the site.

All site visitors and any new contractors shall report to security / reception upon arrival at site. The Contractor will only be granted first time access to work on the site if all required documentation has been provided and approved.

All visitors need to sign an attendance register when visiting the site. Visitors include all persons which are not permanently working on the site, but excludes temporary site workers. Visitors must undergo site induction training before they are allowed on site to make them aware of the site dangers.

19.3 Emergency Numbers / Emergency Evacuation

A list with emergency numbers must be readily available to first aiders and supervisors. Emergency numbers must be site specific and must display the nearest emergency facilities.

The contractor shall identify and formulate emergency procedures in the event an incident does occur. The emergency procedures thus identified shall also be included in the contractor's OH&S plan, and communicated as part of induction training. It is the responsibility of the first aid worker, together with the construction supervisor, to make an assessment regarding the severity of injuries and which actions are appropriate. For example: transfer to a medical facility by ambulance or helicopter.

The Contractor must implement an emergency evacuation procedure on site to ensure that in case of an emergency, all staff will leave their place of work when the emergency siren is sound and proceed to the demarcated emergency assembly point. The emergency assembly point must display the sign "Emergency Assembly Point".

An evacuation route diagram must be displayed and visible at strategic points in buildings and on notice boards.

All staff working on site must be given awareness training on the emergency evacuation procedure and evacuation drills must be exercised to ensure all staff know the correct procedure to follow in case of an emergency.

19.4 Site Security

Certain areas where work must be carried out, is recognized unsafe areas and certain other areas may from time to time become unsafe, due to 3rd party actions. The Contractor must as far as reasonably possible anticipate unsafe areas and must ensure that his site staff is safe from 3rd party actions, which include but is not limited to:

- Unrests,

- Violent Demonstrations,
- Theft,
- Injury from 3rd parties at all times.

The Contractor must, when work is to be carried out in the above-mentioned areas, make provision for security services to accompany site staff during the execution of their work, as the Contractor is responsible for the Health, Safety and Security of his own staff. The provision for security services must form part of the Contractors tender.

19.5 Personal Protective Equipment

Comply with General Safety Regulations, Section 2

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 the 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. The hierarchy of hazard elimination must be followed before the option of personal protective equipment is considered. The following hierarchy of controls must be followed:

- Elimination
- Passive Controls
    - Substitution – Using a cherry picker or man-lift instead of a ladder.
    - Engineering Controls – Installing barrier railings; Installing stairs instead of using vertical ladders.
- Active Controls
    - Administrative policies and procedures
    - Personal protective equipment

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 the hazardous environment.

It is a further requirement that the contractor maintain 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 the employee.

The 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 non-conformance by his employees. Conformance to the wearing of PPE shall be discussed at the weekly inspection meetings.

The contractor shall ensure that all his personnel, excluding those who are permanently office bound, are equipped with reflective safety jackets and that these are worn at all times when working on site. Any person found not wearing a reflective jacket on site must be removed from the site until such time as he is in possession of and wearing a reflective jacket. Reflective safety jackets shall be kept in good condition and any jackets that are ineffective must immediately be replaced by the contractor.

19.6 Site Supervision

Comply with Construction Regulation, Section 8

The Contractor shall appoint a competent Construction Manager who shall be responsible for the construction activities and for ensuring occupational health and safety compliance on the construction site.

19.7 Working in Elevated Positions

Comply with Construction Regulation, Section 10.

The contractor shall ensure that a fall protection plan, developed by a competent person who is designated as the Fall Protection Plan Developer, is available on site and understood by all employees who will be working in elevated positions.

All employees working in elevated positions shall protected themselves from falls by wearing a full body harness and the lanyard shall be attached as far as possible above the head of the worker to a life line or other approved and tested anchor point.

In addition to obvious elevated work activities, work activities which include:

- Working on the edge of an excavation where there is a risk of falling into the excavation;
- Work on the edge of a vertical drop where there is a risk of falling;
- Work on top of tanker trucks and tanks;

shall be considered work in elevated positions and Section 10 of the Construction Regulations must be adhered to at all times. The hierarchy of controls must be implemented when such activities are carried out. As a minimum the employee must wear PPE, which shall include a full body harness attached to a restraint.

19.8 Structures

Comply with Construction Regulations, Section 11.

The contractor shall ensure that all practicable measures are taken to prevent the uncontrolled collapse of new or existing structures or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work. No structure may be loaded in a manner which would render it unsafe.

When a structure is of temporary nature, all conditions as required by the Construction Regulations Section 12 - Temporary Works, must also be complied with.

19.9 Excavations

Comply with Construction Regulations, Section 13

The Contractor shall ensure that all excavations are carried out under the supervision of a competent person who has been appointed in writing as Excavation Supervisor.

The Contractor must evaluate the stability of the ground before excavation work begins as well as during excavation work.

Excavations must be barricaded to prevent unauthorized access.

Material removed from excavations, as well as heavy machinery and construction vehicles, must not be closer than 1 meter of the edge of the excavation, to prevent additional loads on the excavation edge, which could cause cave-ins, to prevent construction vehicles from falling into the excavation and to prevent the accumulation of carbon monoxide gas inside the excavation.

People working in the excavation must be adequately protected from cave-ins, by means of protection systems such as trench boxed and shielding and must have a safe means of access into the excavation and egress from the excavation.

19.10 Scaffolding

Comply with Construction Regulations, Section 16, General Safety Regulations, Section 6 and SANS 10085 – The Design, erection, use and inspection of access scaffolding

The Contractor shall appoint a competent person in writing as scaffolding Supervisor. Scaffolding Inspectors and Scaffolding Erectors must be trained and found competent to carry out scaffolding work. It is important to note that only competent scaffold erectors are allowed to build the scaffolding. The scaffold inspector is not allowed to build the scaffold with the scaffold erector team.

Scaffolding shall be erected according to SANS 10085 and shall be tagged “safe for use” after inspection indicated that the scaffold is safe to use. The inspection of the scaffold shall be in writing and proof thereof shall be available for any user of the scaffold as well as for audit purposes.

Scaffold left erected while the Contractor is not in attendance, must be tagged with a “Not Safe for Use” tag and all reasonably practicable measures must be taken to prevent unauthorised access to the scaffold.

Scaffold must be inspected by the competent scaffold inspector on completion of the scaffold build, weekly thereafter or following severe weather conditions.

Hazards such as overhead power lines must be identified before the scaffold is build and must be reflected in the risk assessment.

When using mobile scaffold, employees and materials must be removed from scaffold before moving the mobile scaffold. Hazards such as overhead power lines must be identified before moving mobile scaffold and must reflect in the risk assessment.

19.11 Suspended Platforms

Comply with Construction Regulation, Section 17, SANS 10295-2 - Suspended access equipment Part 2: Temporary suspended platforms (TSPs)

All suspended platform work must be carried out under the supervision of a competent appointed Suspended Platform Supervisor. Suspended platform erectors, operators and inspectors must be competent.

The contractor must be in possession of a certificate of design for the use of the suspended platform system.

19.12 Cranes

Comply with Construction Regulation, Section 22, General Machinery Regulation, Section 18.

Crane operators must be competent to carry out their work safely and must be in possession of a valid medical certificate of fitness, issued by an occupational health practitioner.

19.13 Construction Vehicles & Mobile Plant

Comply with Construction Regulation, Section 23, National Road Traffic Act, 1996

Construction vehicle operators must have received training to operate the class of construction vehicle or mobile plant and must be in possession of an operators card as proof of competency. Construction vehicle operators must be authorised in writing and have a medical certificate of fitness issued by an occupational health practitioner to operate the construction vehicle and/or mobile plant.

19.14 Electrical Equipment

Comply with Construction Regulations, Section 24.

The contractor shall take adequate steps to ascertain the presence of and guard against danger to workers from electrical cables or apparatus which is under, over or on the site.

The exact location of underground electric power cables must be determined before any excavators are used for excavation purposes.

The location of overhead electrical cables must be assessed when working with cranes and lifting equipment. Injury may be possible from touching the electrical cables with the crane boom, or from arching when the crane boom comes too close to the electrical cable.

All temporary electrical installations must be inspected at least once a week by a competent person and the records of the inspections must be recorded in a register which must be kept on site.

Electrical machinery and extension cords must be is a serviceable condition and must be inspected on a daily basis before use on a construction site by the authorised operator and the inspection checklist must be kept on the construction site.

Electrical Installations

Comply with Electrical Installation Regulations.

All electrical installations shall be inspected and approved by an accredited electrical inspector and a valid Certificate of Compliance must be issued for the installation.

All electrical installations carried out on site (permanent and temporary) must be in accordance and comply with the Electrical Installation Regulations.

All power supplies and generating units must be fitted with a functional earth leakage device.

19.15 Temporary Storage of Flammable Liquids

Comply with Construction Regulation, Section 25 and General Safety Regulations, Section 4.

The Contractor must ensure storage areas of flammable liquids are well ventilated and “No Smoking” signs are placed at the entrances and ventilation ducts of the storage areas. Firefighting equipment must be available in suitable positions around the storage areas.

The Contractor must ensure that good housekeeping is practiced in and around the flammable storage areas.

19.16 Water Environments

Comply with Construction Regulation, Section 26.

The Contractor must ensure that a lifejacket forms part of the employees PPE and is worn when the employee is exposed to the risk of drowning, by falling into water.

The risk assessment must make provision for the rescuing of persons in danger of drowning and for preventing employees from falling into the water.

When working over water environments, Section 10 of the Construction Regulations – Fall Protection will also apply.

19.17 House-keeping

Comply with Construction Regulation, Section 27, Environmental Regulations for Workplaces, Section 6(3).

The Contractor shall ensure that suitable and acceptable house-keeping is continuously implemented and maintained on the construction site. Off-cuts and waste must be removed by the end of the shift or as soon as practicable.

19.18 Stacking & Storage of Material & Equipment

Comply with Construction Regulations, Section 28 and General Safety Regulations, Section 8.

The Contractor shall appoint a competent person in writing with the duty of supervising all stacking and storage operations on site.

Stacking shall only take place in areas specifically demarcated for this purpose. Circular items must be secured with wedges or chocks.

Items removed from a stack shall only take place from the top most layer of the stack.

Stacks shall not obstruct any fire extinguishing equipment, first aid equipment, electrical switchgear (DB Boxes) and ventilation or lighting installations.

Unstable stacks must be broken down immediately.

19.19 Fire Precautions

Comply with Construction Regulation, Section 29.

The Contractor must provide his own firefighting equipment that is within the service date and safe for use. Firefighting equipment must be on a register and inspected by a competent person who has been appointed in writing.

Suitable and sufficient fire extinguishing equipment must be placed at strategic locations and a sufficient number of firefighters must be available, which must be trained in the use of it.

19.20 Intoxicating Liquor and Drugs

Comply with General Safety Regulations, Section 2A.

The site limit for intoxication is set to 0 (zero) to complement a vision of zero tolerance.

Any person found to be intoxicated, or consuming intoxicating liquor or illegal drugs, will not be allowed onto the premises and/or will be removed from the premises.

The Contractor has the right to test any person entering the premises for intoxicating liquor or illegal drugs and may refuse entrance on the basis of the outcome of the test.

The Contractor shall ensure that employees taking prescription medicine informs the Contractor of such and shall ensure that the side effect of such medicine does not constitute a hazard to the employee himself or people working in close vicinity to the employee.

19.21 Confined Space Work & Tunnelling

Comply with Construction Regulation, Section 15 and General Safety Regulations, Section 5.

The Contractor shall ensure that only authorized persons enter confined spaces.

An entrance log must be kept to ensure people are not left inside the confined space. Adequate air monitoring must be carried out before entering the confined space. When air monitoring indicated the oxygen to be less than 20% by volume, the confined space must be purged and ventilated to obtain a safe atmosphere or self-contained breathing apparatus must be used.

19.22 Site Services

The Contractor shall provide and maintain on the Site adequate and suitable sanitary services 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

Drinking Water

The Contractor must ensure that an adequate supply of potable drinking water is available 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. Employees working in hot conditions must consume enough water per hour to prevent dehydration.

Where water is unsafe for human consumption, it must be so indicated by means of adequate signage.

Accommodation

The Contractor shall comply with the requirements of Construction Regulation 30 with regards to employee's facilities and accommodation. Reasonable and suitable living accommodation must be provided to employees who are far removed from their homes.

I _____, duly authorised to sign this Health and Safety Specification on behalf of _____ (the Contractor), do hereby declare that I acknowledge having read and understand this Health and Safety Specifications.

Signed at _____ on this _____ day of _____ 20_____.

_____

Contractor Representative Name

_____

Signature

_____

Date

E3: OHS Audit Questionnaire

APPENDIX F

- **Bridges**
- **Culverts**
- **High Mast Lights**
- **Retaining walls**
- **Gantries**
- **Tunnels**
- **Buildings**

APPENDIX G

INTEGRATED TRANSPORT INFORMATION SYSTEM

SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD
Reg.No.1998/009584/30
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

Integrated Transport Information System

ITIS Public User Registration

July 2018

Publication Details

Documentation Details

This document was developed for the South African National Road Agency (SANRAL). For content revisions, questions, or comments, contact the writer at itisissues@nra.co.za .

Copyright

© South African National Roads Agency 2018. All rights reserved. Copyright of material presented in this user manual is owned by SANRAL. Unless otherwise stated, the reproduction, publication, performance, communication or adaptation of the material presented in this manual is permitted, provided that SANRAL is acknowledged as the copyright owner. In addition, that the material is not modified or used in a manner prejudicial to the purposes and/or reputations of SANRAL, there are no specific overriding copyright conditions relating to the material, and no charge, claim or encumbrance is made upon any recipient of the material.

Revision History

Revision	Description of Change	Author	Effective Date
0	Initial Release	K Niebuhr	July 2018

Disclaimer

This document is provided for informational purposes only and SANRAL does not warrant, guarantee or make any representations regarding the currency, accuracy, correctness, reliability, usability or any other aspect of the information presented in this document, nor of material provided by others. The entire risk of the use or the result of the use of this document remains with the user. Information in this document is subject to change without prior notice.

Technical Support

For technical support please send an email to ITIS Support at itisissues@nra.co.za. The email needs to contain a short description of the problem in the Subject field. Please note that emails without a subject will be rejected. In the body of the email please describe your problem and provide your contact details.

Table of Contents

1. REGISTRATION C-125

1. Registration

To register a new ITIS user, go to the ITIS website https://itis.nra.co.za

i. Click on Register and accept the Term and Conditions and click on Next
ii. Select Public User from the dropdown on the registration category screen. Click on Next

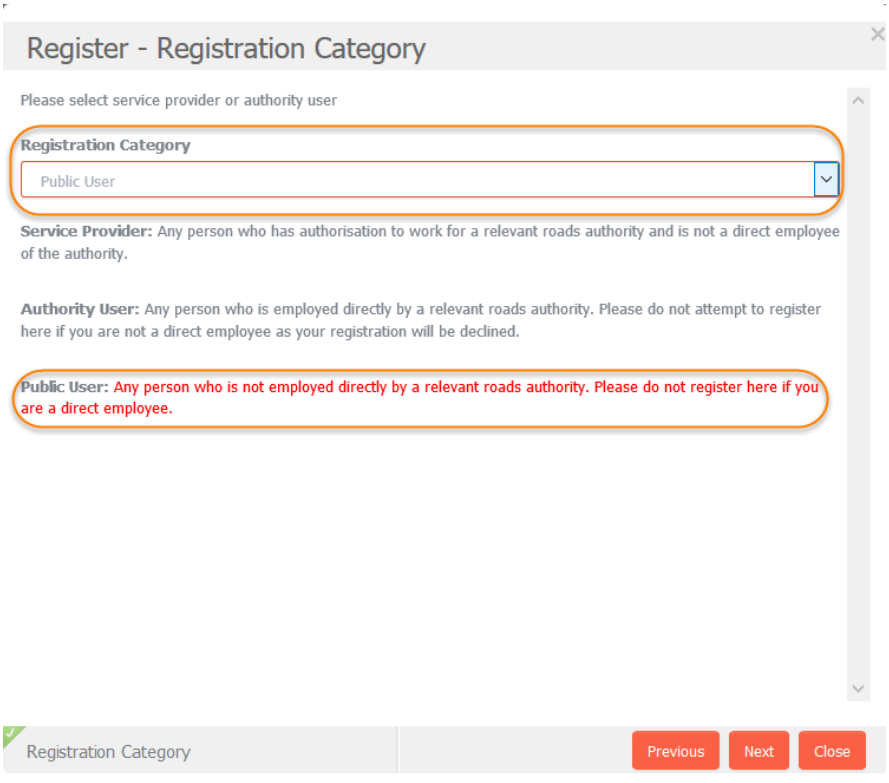


Figure 1: Registration Category

iii. Complete the User details form:

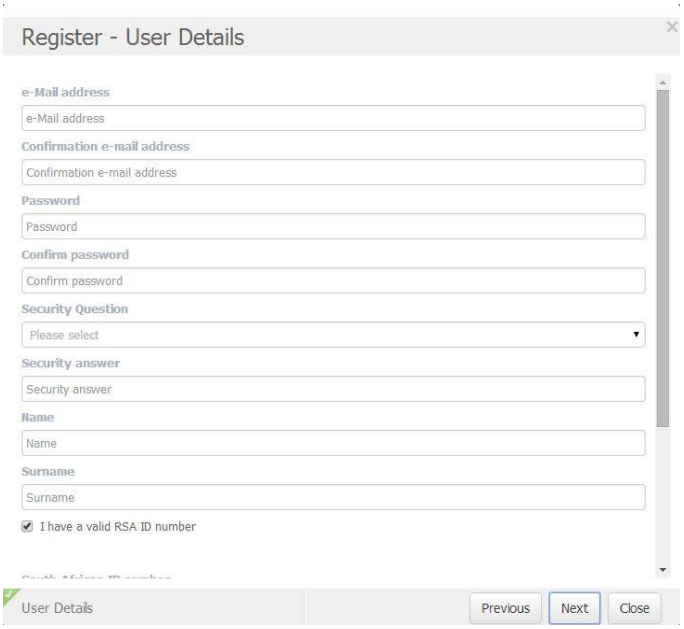


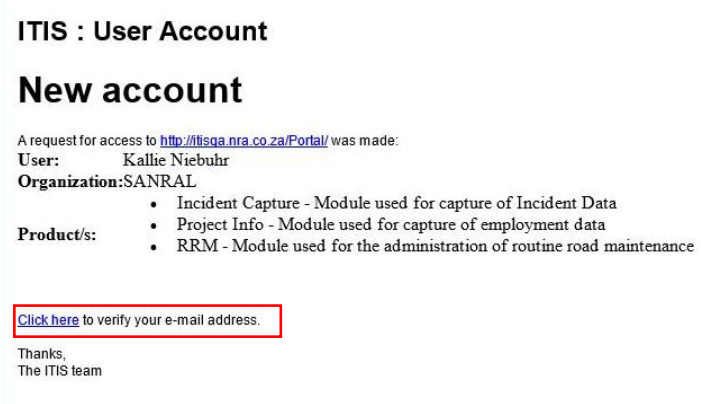
Figure 2: User Details

- **E-Mail Address -** This email address will be used as your user name to access this website and the ITIS software. Each user must have their own email address and users will not be allowed to share an email address
- **Password -** This password will be required when trying to access the website and the ITIS software. The password must contain at least 1 UPPERCASE letter, 1 lowercase letter, 1 special character and 1 number
- **Security Question -** Select a security question from the dropdown. This question will be used for confirmation when resetting your password
- **Security Answer -** Enter the answer to the question selected above
- **Name -** Your name
- **Surname -** Your surname
- **Telephone Number -** Your telephone number at the office
- **Mobile Number -** Your mobile number
- **Fax Number -** Your Fax number

iv. Click on Next

v. Enter the characters as seen on the Captcha Image and click on Register

vi. Clicking on Register will send a verification email to the email address you specified. Open the email and click on the email verification link.



ITIS : User Account

New account

A request for access to http://itisqa.nra.co.za/Portal/ was made:

User: Kallie Niebuhr

Organization: SANRAL

Product/s:

- Incident Capture - Module used for capture of Incident Data
- Project Info - Module used for capture of employment data
- RRM - Module used for the administration of routine road maintenance

Click here to verify your e-mail address.

Thanks,
The ITIS team

Figure 3: Verification Email

vii. After a successful email verification, you should be able to Login

APPENDIX H

SARDS Manual

APPENDIX I

2nd TIER PROCUREMENT PROCEDURE

Procurement of Sub-services

Second (2nd) tier procurement include the procurement of any work where either the work is not scheduled or priced, or where the process of procurement of the sub-Service Provider is by means of a prescribed 2nd tier pro-forma document provided by the Employer. It includes the procurement of work where rates have been omitted of where allowance for work is made under provisional sum or prime cost sum.

The following procurement methods is to be followed:

e) Where work is not scheduled but existing rates for similar work exist in the contract and the work can therefore be executed by the Service Provider or his Targeted Enterprise at existing rates.

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

f) Where work is scheduled and the payment calculation is based on a formula specified in the contract document, or where the payment rate is pre-determined or fixed by the Employer.

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

g) Where the supplier/sub-Service Provider is not selected by the Service Provider and actual cost is re-imbursable and no procurement process is possible.

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

h) Where there are omitted items as part of the existing scheduled scope of work and no existing rates for similar work exist in the contract.

   A proposal for a new rate shall be submitted by the Service Provider and evaluated by the Employer, by comparing with either adjusted relevant rates in the contract, or by comparing with similar rates on similar contract, or by comparing 3 (three) informal quotes to substantiate the rate. The new agreed rate is approved through the Works Authorisation process.

i) Where work is scheduled under a provisional sum or prime cost sum and the Employer prescribes a 2nd tier pro-forma either by quotation process or open tender process.

   The work is to be procured by means of the 2nd tier pro-forma and approved through the Works Authorisation process.

j) Where work is scheduled under a provisional sum or prime cost sum and there is no approved pro-forma available from the Employer and the estimated cost of the work is equal or less than R1 million.

   A minimum of 3 (three) quotations shall be obtained from sub-Service Providers and approved through the Works Authorisation process.

   The following is the minimum requirements for this process:

- Valid B-BBEE Certificate / Sworn Affidavit.
- Quotation to include form of quotation, CSD registration, tax compliance certificate/PIN number and a B-BBEE certificate/.
- Quotations to be evaluated on price and preference.

g) Where work is scheduled under a provisional sum or prime cost sum and there is no approved pro-forma available from the Employer and the estimated cost of the work is more than R1 000 000.00.

The work is to be procured through an open tender and approved through the Works Authorisation process. The following is the minimum requirements for this process:

- Tenders to close at the office of the Employer.(if feasible)
- Valid B-BBEE Certificate / Sworn Affidavit.
- Tender documents to include Form of Offer, CSD registration, tax compliance certificate/PIN number, an original or certified copy of the original B-BBEE certificate, SBD1, SBD4, SBD8, SBD9, SBD6.2 and Form A2.2.
- Tenders to be evaluated on price and preference.

h) The following list of items is exempted from the provisions of paragraphs (f) and (g) and an indication of the method or minimum requirements are given under “Procurement Requirements”.

Item no	Description	Unit	Procurement Requirements
32.01(c)	Toll fees	Prime cost	Method (c)
34.01(b)	Hiring of venue and/or coach	Prime cost	3 (three) quotations and B-BBEE for over *R30 000.00
35.01(d)(i)	Training by Contract Engineer	Prov sum	Method (b)
35.01(d)(ii)	Remuneration of ACE	Prov sum	Method (b)
35.01(d)(iii)	Disbursements	Prime cost	3 (three) quotations and B-BBEE for over *R30 000.00
35.03(a)	Site supervision staff	Prov sum	Salaries to be agreed with the Employer
35.03(c)	Project Liaison Officer	Prove sum	Method (b)
35.03(e)	Accommodation	Prov sum	3 (three) quotations and B-BBEE for over *R30 000.00
35.03(h)	Trainee (student)	Prov sum	Method (b)
35.04(a)	Travelling to perform duties	Prov sum	Method (b)
35.04(c)	Toll fees	Prime cost	Method (c)
36.03(a)	Disbursements	Prime cost	3 (three) quotations and B-BBEE for over *R30 000.00
36.06(b)	Liaison with PLC	Prov sum	Method (b) or (d)
36.06(c)	PLC stipend	Prov sum	Method (b)

* CSD to be checked first for service providers, if not available. CSD registration for the awarded service provider to be done.

PART C5: ANNEXURE