

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

CONTRACT SANRAL N.003-030-2017/8 C-SL

SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

DATE: JULY 2023

SUB-CONTRACT TENDER DOCUMENT

CHIEF EXECUTIVE OFFICER SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED 48 TAMBOTIE AVENUE

VAL DE GRACE PRETORIA, 0184

NAME OF TENDERER:

Set sequential number



CONTRACT SANRAL N.003-030-2017/8 C-SL

FOR

SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

THIS DOCUMENT COMPILED BY:

WSP Group Africa (Pty) Ltd Building 1 Maxwell Office Park, Magwa Crescent West Waterfall City Midrand, 1685

Tel: +27 11 300 6000 Fax: +27 11 361 1301 Email: marshall.muthen@wsp.com

UNDER THE DIRECTION OF THE REGIONAL MANAGER THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

The Regional Manager Eastern Region) 58 Van Eck Place Mkondeni Pietermaritzburg 3204

Tel: +27 33 392 8100 Fax: +27 33 386 3365 Email: brooksh@nra.co.za

LIST OF CONTRACT DOCUMENTS

The following documents form part of this contract:

1. The Project Document, containing the tender notice, Conditions of Tender, Tender Data, Returnable Schedules, general and particular conditions of contract, project specifications, Pricing Schedule, Form of offer and Site Information is issued by the Employer. The Employer's Form of Acceptance and any correspondence from the selected tenderer, performance security-demand guarantee and all addenda issued during the period of tender will also form part of this volume once a successful tenderer has been appointed.

Notes to tenderer:

- 1. The Project Document is issued at tender stage in electronic format and contains the following files:
 - The full Project Document in PDF format

2. SUBMISSION OF TENDER – Of the contract documents, only the following elements of Volume 3 needs to be submitted:

VOLUME 3 – ELECTRONIC SUBMISSION

The following information has to be submitted electronically on flash drive

- a) The 1st file in pdf format which contains;
- Scanned copy of Form of Offer (pdf) and printed hardcopy of Form of Offer
- Scanned copies of all returnable schedules and attachments (pdf)
- Scanned copy and printed Summary of Pricing Schedule.
- b) The 2nd file in Excel format which contains:
- Completed pricing schedule

For alternative offers the tenderer shall submit the following additional documentation, printed and bound hard copy and electronically in a separate flash drive marked

- a) Alternative (followed by the Tenderer name)" in a sealed envelope in the following order:
- Form of Offer (signed and scanned as .pdf and state "Alternative Form of Offer" and printed hardcopy of Form of Offer)
- All returnable schedules and attachments and certificates applicable to the alternative offer (signed and scanned as .pdf).
- b) Alternative Pricing Schedule (printed Summary of Pricing Schedule and copy in Excel)
- Other relevant information.

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PART T1: TENDERING PROCEDURES

PART T1: TENDERING PROCEDURES

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T1.1 TENDER NOTICE AND INVITATION TO TENDER (INCORPORATING SBD1)

CLOSING DATE (AT 11:00): 18th August 2023

The South African National Roads Agency SOC Limited (SANRAL) on behalf of WSP Group Africa (Pty) invites Joint Ventures between suitably experienced, SANAS accredited laboratories and Targeted Partners for undertaking site laboratory testing in accordance with SANS 3001 for upgrading of National Route 3, Section 3 from Gladys Manzi Road (km 5.9) to New England Road Interchange (km 9.0). This project is in the province of KwaZulu-Natal and in the district municipality of Umgungundlovu and the approximate duration is of 42 months, commencing September 2023.

Preferences are offered to tenderers who comply with the criteria stated in the Tender Data.

The tenderers will be evaluated on functionality (quality) criteria with a threshold of 70%.

Only tenderer who are a Joint Ventures (JV), meet the minimum requirements for the key persons and are registered on CSD as stated in clause 4.1.1 will be eligible to tender.

TENDER DOCUMENTS

Tender documents are available from 21 July 2023 at no cost in electronic format downloadable from the SANRAL's website by following the link:

https://www.nra.co.za/sanral-tenders/status?region_id=national

Tenderers must have access to Microsoft © Office 2013 and Acrobat Adobe © 9.0 or similar compatible software.

Tenderers must submit, via email, the duly completed Form A1.1 Certificate of Intention to Submit a Tender prior to 31st July 2023. Failure to submit this certificate would result in the tenderer not receiving addenda or additional issued information and may result in the tenderer being non-responsive.

TENDERER'S MEETING

A non-compulsory tender clarification meeting will be held online on the 04th August 2023 at 10h00. A Microsoft Teams link will be sent to tenderers who would have submitted Form A1.1 Certificate of Intention to submit Tender.

A tenderer's clarification briefing presentation is available to be downloaded from the SANRAL website by the following link https://www.nra.co.za/sanral-tenders/status?region_id=national.

COMPLETION AND DELIVERY OF TENDERS

The closing time and date for receipt of tenders is 11:00 on 18th August 2023

Telegraphic, telephonic, telex, e-mail, facsimile and late tenders will not be accepted.

Tenders may only be submitted in the format as stated in the Tender Data.

Requirements for completing, sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

Queries relating to issues arising from these documents may be addressed to:

Mr Marshall Muthen of WSP Group Africa (Pty) Ltd

Tel: No. +27 11 300 6000 Fax No. +27 11 361 1301

e-mail: marshall.muthen@wsp.com

cc: koketso.rammutla@wsp.com

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T1.2 CONDITIONS OF TENDER

Note to tenderer:

The Conditions of Tender are the Standard Conditions of Tender as contained in SANS 10845-3:2015 Edition 1.

SANS 10845-3:2015 Edition 1 is obtainable from SABS Standards Division, 1 Dr Lategan Road, Groenkloof or Private Bag X191, Pretoria, 0001. Tel: +27 12 428 7911 Fax: +27 12 344 1568. website: www.sabs.co.za.

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T1.3 TENDER DATA

The Standard Conditions and the Employer's Special Conditions of Tender for Procurement make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard/special conditions of tender.

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

CLAUSE NUMBER	TENDER DATA	
2.1	Wherever reference is made in the documentation to Pricing Schedule.	Bill of Quantities it shall also mean
2.7	Wherever reference is made in the documentation service provider.	to contractor it shall also mean
3.1	The Employer is WSP Group Africa (Pty) Ltd The Employer's domicilium citandi et executand address) is: WSP Group Africa (Pty) Ltd Building 1 Maxwell Office Park, Magwa Crescent West Waterfall City Midrand, 1685 The Employer's address for communication relating	
	POSTAL AND PO Box 6001 Halfway House 1685	DELIVERY Building 1 Maxwell Office Park Magwa Crescent West Waterfall City Midrand, 1685
3.2	The tender documents issued by the Employer will be the following: (specific colours only applicable to the Part T1: Tendering Procedures T1.1 Tender notice and invitation to tender T1.2 Standard and Special Conditions of Tender T1.3 Tender data Part T2: Returnable Schedules T2.1 List of returnable documents T2.2 Tender schedules Part C1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Other contract forms	e in electronic format and comprise final signed contract document)

	T	
	Part C2: Pricing data	(Mallann)
	 C2.1 Pricing instructions C2.2 Pricing Schedules / Bills of Quantities 	(Yellow) (Yellow)
	C2.2 Pricing Schedules / Bills of Quantities	(Tellow)
	Part C3: Scope of work	
	C3 Scope of work	(Blue)
	Part C4: Site Information	(0)
	C4 Site Information	(Green)
	Part C5: Annexure	(White)
	Tart oo. Alliexare	(vviiite)
3.4	The Employer's Agent is Marshall Muthen	
	They can be contacted at marshall.muthen@wsp.o	com or 011 300 6000.
	The lenguage for communications is English	
	The language for communications is English.	
3.5	The tender process may be cancelled if:	
0.0	a) Due to changed circumstances, there is no lor	nger a need for the goods or
	services specified in the invitation;	
	b) Funds are no longer available to cover the total	al envisaged expenditure;
	c) No acceptable tender is received; or	
	d) There is a material irregularity in the tender pr	ocess
4.1.1	Only those tenderers who satisfy the following criteri	a are eligible to submit tenders:
	, , , , , , , , , , , , , , , , , , ,	S .
	(a) A Joint Venture composed as follows	
	i) The lead partner shall be an experienced SANA	
	ii) The Targeted Partner(s) is(are) defined in ac	ccordance with the requirements of
	SANS 10845 Part 6 (table B.2) as A QSE, EME or Start-up and	
	- 51% black owned and	
	- Status Level 1 or 2 B-BBEE contributor and	d
	- Minimum of 30% equity JV (CIDB JV agree	ement to be provided)
	(b) Meet the minimum requirements for the key persons a	
	(i) Senior Site Laboratory Manager (Highest qua candidate regarding years' experience to be p	
	Relevant National Diploma and 10 years relev	
	and 10 years relevant experience; or	unt experience of felevant (1.Q)
	Grade 12 and 15 years relevant experience or	relevant NQF 4 and 15 years
	relevant experience	
	(i) Site Laboratory Manager - to be provided by	
	qualification and affidavit from candidate reg	arding years' experience to be
	provided): Relevant National Diploma and 3 years releva	nt experience or relevant NOF 6 and
	3 years relevant experience; or	in experience of felevant (ver o and
	Grade 12 and 8 years relevant experience or re	elevant NQF 4 and 8 years relevant
	experience; or	
	Grade 10 or equivalent and 15 years relevant e	
	(ii) Quality Assurance Manager: (Copies of certif	icates and attidavit from candidate
	regarding years' experience to be provided) Minimum 8 years' relevant experience in Civ	il Engineering Materials Testing
	Laboratories and must hold a SANAS issued	
	Systems Course based on ISO17025 and the la	•
	ISO17025.	-
	(a) Registered on the National Transver Control Con-	nlier Detabase
	(c) Registered on the National Treasury Central Sup	plier Database.

	Each member of the JV, shall be registered on the National Treasury Central Supplier Database on the closing date for tender submissions. Tenders received from such tenderers who do not comply with this requirement will not be considered.
4.6	Failure to apply instructions contained in addenda may render a tenderer's offer non-responsive in terms of Conditions of Tender 5.8.
4.7	A non-compulsory tender clarification meeting will be held online on the 04 th August 2023 at 10h00. A Microsoft Teams link will be sent to tenderers who would have submitted Form A1.1 Certificate of Intention to submit Tender. A tenderer's clarification briefing presentation is available to be downloaded from the SANRAL website by the following link https://www.nra.co.za/sanral-tenders/status?region_id=national
4.8	Request clarifications at least 12 (twelve) working days before the closing time.
4.10	Tenderers are required to state the rates and currencies in Rand.
4.12	Alternative offers are generally not acceptable due to possible manipulation of the tender process and resulting complexity of the evaluation. Therefore the submission of alternative tenders is strongly discouraged.
	The submission of alternative key persons will be considered as a non-responsive offer.
	However, a tenderer wishing to submit an alternative offer shall first apply to the Employer with full details of the principles of the alternative for confirmation that the Employer's standards and requirements are not compromised or reduced. Such confirmation must have been provided by the Employer in writing at least 5 (five) working days before the date and time of tender closing, or as extended by an addendum sent to all tenderers. The application shall not be submitted later than 7 (seven) working days before the date and time of tender closing given in Tender Data Clause 4.15.
4.13.1	The returnable documents shall be electronically completed in their entirety, submitted on the issued software format or fully compatible format, unless otherwise specified.
	Option 1: Submission in the tender box
	Only the following needs to be submitted:
	a) Main Tender Offer
	The following information to be submitted electronically on flash drive and marked Main Tender Offer followed by the "Tenderer name", in the following order:
	- Form of Offer (signed and scanned as .pdf) and printed hardcopy of Form of Offer
	- All returnable schedules and attachments and certificates specific to the tender (signed and scanned as .pdf)
	- Completed pricing schedule (scanned copy in .pdf and copy in Excel) and printed hardcopy of Summary of Pricing Schedule."
	b) For alternative offers the tenderer shall submit the following additional documentation, in an electronically on a separate flash drive marked Alternative followed by the "Tenderer name": - Form of Offer (signed and scanned as .pdf and state "Alternative Form of Offer") and printed hardcopy of Form of Offer
	- All returnable schedules and attachments and certificates applicable to the alternative offer (signed and scanned as .pdf)
	- Alternative Pricing Schedule (scanned copy in .pdf and copy in Excel) and printed hardcopy of Summary of Pricing Schedule."
	- Other relevant information

4.13.4	
	The returnable documents shall be electronically completed in their entirety, submitted on the issued software format or fully compatible format, unless otherwise specified.
	Option 1: Submission in the tender box
	• Submit the tender offer electronically on a flash drive and printed hard copy of Form of Offer and summary of pricing schedule.
	• (In the relevant MS Word 2013 and MS Excel 2013 format as issued, and not in .pdf format, except where so specified.)
4.13.5	Option 1: Submission in the tender box
	A one-envelope procedure will apply as follows:
	1. A folder is provided marked
	a. Ensure that all returnable schedules listed in List of Returnable Schedules are completed. Wherever it is a requirement to attach certificates or letters to the returnable schedules, these should be submitted.
	b. Upload the A-Forms (pdf.), B-Forms (pdf), C-Forms and certificates or letters (pdf.) on the flash drive.
	The completed document must be uploaded on flash drive and the printed hard copy of Form of Offer and summary of pricing schedule should be marked with the tenderer's company name, the project number and description".
	3. The envelope shall state on the outside the Employer's address, contract number and title as well as the Tenderer's name, authorised representative's name, postal address and contact telephone numbers.
	4. Seal envelope and in an outer envelope write the words "TENDER" clearly marked and bearing the Employer's name, contract number and description as well as the Tenderer's authorised representative's name, postal address and contact details.
4.15	Submission in Tender box: Electronic submissions will not be accepted. The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:
	The Regional Manager (Eastern Region) The South African National Roads Agency SOC Ltd 58 Van Eck Place, Mkondeni Pietermaritzburg, 3204
	Tel: (+27) 33 392 8100 Fax: (+27) 33 386 3365
	Location of tender box: Reception Area Physical address: 58 Van Eck Place, Mkondeni Pietermaritzburg, 3204
	Identification details: Place the signed original tender offer in a package marked.
	TENDER SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)
	Tenderer's Name: Tenderer's Authorised Representative: Tenderer's Address and Contact Details:

	Tenders must be submitted during office hours (09:00 to 16:00) Monday to Friday at the Employer's address.
4.15.2	The closing time for submission of tender offers is 11:00 on 18th August 2023
4.16.1	The tender offer validity period is 18 weeks.
4.16.2	Where a tenderer, at any time after the opening of his tender offer but prior to entering into a contract based on his tender offer:
	 (a) withdraws his tender; (b) gives notice of his inability to execute the contract in terms of his tender; or (c) fails to comply with a request made in terms of 4.17, 4.18 or 5.9;
	such tenderer shall be barred from tendering on any of the Employer's tenders for a period to be determined by the Employer, but not less than 6 (six) months, from a date determined by the Employer. This sanction also applies to tenders under evaluation and not yet awarded. The Employer may fully or partly exempt a tenderer from the provisions of this conditions if he is of the opinion that the circumstances justify the exemption.
4.18	Any additional information requested under the clause must be provided within 5 (five) working days of date of request.
5.1	The Employer shall respond to clarifications received up to 12 (twelve) working days before tender closing time.
5.2	The Employer shall issue addenda until 10 (ten) working days before tender closing time.
5.4	Opening of tender submissions are:
	Time: 11h00 on 18 th August 2023 Location: A live streaming link will be sent to tenderers who would have submitted Form A1.1 Certificate of Intention to Submit a Tender.
5.7	Prior to disqualification, the Employer shall inform the tenderer and give the tenderer an opportunity to make representations within 14 days as to why the tender submitted should not be disqualified and as to why the tenderer should not be restricted by the National Treasury from conducting any business with any organ of state for a period not exceeding 10 years.
	In the event of disqualification, the Employer may, at its sole discretion, claim damages from the tenderer and impose a specified period during which tender offers will not be accepted from the offending tenderer and, the Employer shall inform the National Treasury in writing.
5.8	A Substantially responsive tender is a tender in which all of the material information and documentation submitted at close of tender contains non-material and non-conformities to the bid specifications but are not related to price. The correction of any such documentation or information, or the condonement for the non-inclusion of any such document or information may not be prejudicial towards the offer and claimed preference of any responsive tender or be construed to be giving an unfair advantage to any tender.
	A responsive tender is also one that conforms to all the terms, conditions, and scope of work of the tender documents, without material omissions. The test for a material omission is the same as the test for a material deviation or qualification.
5.9	Arithmetical errors, omissions, discrepancies and imbalanced unit rates

Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount appearing in the summary to the Pricing Schedule shall govern.

Check responsive tender offers for:

- (a) the gross misplacement of the decimal point in any unit rate;
- (b) omissions made in completing the Pricing Schedule or Bills of Quantities; or
- (c) arithmetic errors in:
 - line item totals resulting from the product of a unit rate and a quantity in Bills of Quantities or Schedules of Prices; or
 - (ii) the summation of the prices:
- (d) imbalanced unit rates.

Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers.

Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows:

- (a) if Bills of Quantities or Pricing Schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the unit rate shall govern, and the line item total shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted and the unit rate shall be corrected.
- (b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall be corrected.
- (c) Where the unit rates are imbalanced, adjust such rates by increasing or decreasing them and selected others while retaining the total of the prices derived after any other corrections made under (a) and (b) above.

Where there is an omission of a line item, no correction is possible, and the offer may be declared non-responsive.

Declare as non-responsive and reject any offer from a tenderer who elects not to accept the corrections proposed and subject the tenderer to the sanction under 4.16.2.

The tenderer is required to submit balanced unit rates for Rate Only items in the Pricing Schedule. The rates submitted for these items will be taken into account in the evaluation of tenders.

5.11.1 The procedure for the evaluation of responsive tenders is Method 3.

If two or more tenders score an equal total number of points, the contract must be awarded to the tenderer that scored the highest points of B-BBEE.

If functionality is part of the evaluation process and two or more tenderers score equal total points and equal preference points for B-BBEE, the contract must be awarded to the tenderer that scored the highest points for functionality.

If two or more tenders score equal total points in all respects, the award must be decided by the drawing of lots.

5.11.7 Scoring Financial Offers

 80/20 preference point system for acquisition of goods and services for Rand value equal to or above R2 000 and up to R50

The following formula will be used to calculate thee points out of 80 for price:

Ps = 80(1-(Pt-Pm)/Pm)

Where:

Ps is the points scored for price of tender under consideration.

Pt is the price of the tender under consideration; and

Pm is the price of the lowest acceptable tender.

 90/10 preference point system for acquisition of goods and services for Rand value above R50 million

Ps = 90(1-(Pt-Pm)/Pm)

Where:

Ps is the points scored for price of tender under consideration.

Pt is the price of the tender under consideration; and

Pm is the price of the lowest acceptable tender.

In the event that the calculated value is negative, the allocated score shall be 0 (zero).

5.11.8

Preference points are based on a tenderer's scorecard measured in terms of the Broad-Based Black Economic Empowerment Act (B-BBEE, Act 53 of 2003 as amended in Act 46 of 2013) and the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000).

The following table must be used to calculate the points out of 20 or 10 for B-BBEE:

B-BBEE Status Level of contributor	Number of Points for financial value up to and including R50 000 000	Number of Points for financial value above R50 000 000
1	20	10
2	18	9
3	14	6
4	12	5
5	8	4
6	6	3
7	4	2
8	2	1
Non-complaint contributor	0	0

Eligibility for B-BEE points is subject to the following conditions:

- 1. A tenderer's scorecard shall be a B-BBEE Certificate issued in accordance with:
 - the amended Construction Sector Codes published in Notice 931 of 2017 of Government Gazette No. 41287 on 1 December 2017 by the Department of Trade and Industry; or
 - in the event that the Measured Entity operates in more than one sector or a sub-sector, the scorecard for the sector or sub-sector in which the majority of its core activities (measured in terms of annual revenue) are located will be acceptable.

- 2. The scorecard shall be submitted as a certificate attached to Returnable Schedule Form A13; and
- 3. The certificate shall:
 - (i) have been issued by a verification agency accredited by the South African National Accreditation System (SANAS)
 - (ii) be in the form of a sworn affidavit (accompanied by a financial statement or Management Account on the latest financial year) or a certificate issued by the Companies and Intellectual Property Commission in the case of an Exempted Micro Enterprise (EME) with a total annual revenue of less than R1.8million if sued in accordance with the amended Construction Sector Codes published in Notice 931 of 2017 of Government Gazette No. 41287 on 1 December 2017 by the Department of Trade and Industry; and
 - (iii) have a date of issue less than 12 (twelve) months prior to the original advertised tender closing date or
 - (iv) be in the form of a sworn affidavit or a certificate issued by the Companies and Intellectual Property Commission in the case of an Exempted Micro Enterprise (EME) with a total annual revenue of less than R3 million if issued in accordance with the amended Construction Sector Codes published in Notice 931 of 2017 of Government Gazette No. 41287 on 1 December 2017 by the Department of Trade and Industry; and
 - (v) Have a date of issue less than 12 (twelve) months prior to the tender closing date

4. A valid B-BBEE Certificate must contain:

- Name of enterprise as per enterprise registration documents issued by CIPC, and enterprise business address.
- Value-Added Tax number, where applicable.
- The B-BBEE Scorecard against which the certificate is issued, indicating all elements and scores achieved for each element. The actual score achieved must be linked to the total points as per the relevant Codes.
- B-BBEE status with corresponding procurement recognition level.
- Have a date of issue and expiry (e.g. 9 June 2018 to 8 June 2019). Where a
 measured entity was subjected to a re-verification process, due to material
 change, the B-BBEE Verification Certificate must reflect the initial date of issue,
 date of re-issue and the initial date of expiry. Re-verification does not extend
 the lifespan of the B-BBEE Verification Certificate;
- Financial period which was used to issue the B-BBEE Verification Certificate.

5. A valid Sworn Affidavit must contain:

- Name/s of deponent as they appear in the identity document and the identity number.
- Designation of the deponent as either the director, owner or member must be indicated in order to know that person is duly authorised to depose of an affidavit.
- Name of enterprise as per enterprise registration documents issued by the CIPC, where applicable, and enterprise business address.
- Percentage black ownership, black female ownership and whether they fall within a designated group.
- Indicate total revenue for the year under review and whether it is based on audited financial statements or management accounts.
- Financial year-end as per the enterprise's registration documents, which was used to determine the total revenue. The valid format of the Financial Year-End is Day/Month/Year.
- B-BBEE status level. An enterprise can only have one status level.
- Date deponent signed and date of Commissioner of Oath must be the same.
- Commissioner of Oath cannot be an employee or ex officio of the enterprise because, a person cannot by law, commission a sworn affidavit in which they have an interest.

- Compliance with any other information requested to be attached to Returnable Schedule; and
- 7. In the event of a Joint Venture (JV), a project-specific consolidated (must contain SANRAL's project/contract number) valid B-BBEE verification certificate in the name of the JV and issued by a verification agency accredited by the South African National Accreditation System (SANAS) shall be submitted.

Black ownership

The bidder must complete Form A15: Black ownership declaration.

*Verification of ownership will be based on share certificate. SANRAL reserves the right to engage with the shareholders.

Sub-contracting

If the tender documents indicate that the tenderer intends sub-contracting more than 25% of the value of the contract to any other person not qualifying for at least the status level that the tenderer qualifies for, 0 (zero) points for B-BBEE level (under Specific Goals) shall be awarded, unless the intended sub-contractor is an EME that has the capacity to execute the sub-contract.

Criteria for breaking deadlock

If two or more tenders score the same number of points and these tenders are also the highest ranked tenders, the tender with the highest preference points will be recommended for award.

If functionality is part of the evaluation process and two or more tenders score equal total points and equal preference points, the tender that scored the highest points for functionality will be recommended for award.

If two or more tenders score the same number of financial points and preference points and these tenders are also the highest ranked tenders, the tenderer to be recommended for award will be decided by the drawing of lots

5.11.9 Calculate the total number of tender evaluation points for quality using the following formula $N_Q = A + B + C + D$ for which the procedure for the scoring is described with each form in the Returnable Schedule and is summarised as follows:

Description of Quality C	riteria an	d Sub-Criteria	Maximum Number of Tender Evaluation Points
Maximum Quality Points Ava	<u>ilable</u>		
Technical and Managerial aspects of the Site Laboratory Manager	Form B1	30	
Technical and Managerial aspects of the Quality Assurance Manager	Form B2	20	100
Quality Assurance Management system coverage of test methods in the main laboratory	Form C1	20	

Quality Assurance Management system Form coverage of **project specific** 30 C2test methods in the main laboratory 100 points The minimum number of evaluation points for quality is 70 out of 100. Form B1 shall be completed for only the Senior Site Laboratory Manager where both a Senior Site Laboratory Manager and a Site Laboratory Manager is required. An explanation of the evaluation methodologies regarding Technical and Managerial Experience are provided as part of Returnable Schedule Form B1 and Form B2. An explanation of the evaluation methodology regarding Quality Assurance Management System is provided as part of Returnable Schedule Form C1 and Form C2. The JV shall only be able to use one accredited facility's schedule of accreditation from SANAS in their submission for Quality Evaluation. The tenderer shall identify the accredited facility on each of the forms that is part of the quality evaluation through the SANAS Accredited Facility number. Only one SANAS Accredited Facility number from the Lead Partner may be used in the tender submission, with the provision that the Site Laboratory Manager or Senior Site Laboratory Manager may still obtain Technical Signatory points should the Technical Signatory be on a different Schedule of Accreditation. Points awarded for quality are not carried forward to subsequent evaluation stages. If the tenderer does not comply with the requirements for the quality evaluation, the tender will be considered non-responsive. The quality threshold and manager staffing are set as follows: Periodic Maintenance Type Project → Threshold 60 % → Site Lab Manager from the Lead Partner and a Trainee Site Lab Manager from the Targeted Partner Special Maintenance Type Project → Threshold 65% → Senior Site Lab Manager from the Lead Partner and a Site Lab Manager from the Targeted Partner Strengthening Type Project → Threshold 65% → Senior Site Lab Manager from the Lead Partner and a Site Lab Manager from the Targeted Partner Improvements Type Project → Threshold 70% → Senior Site Lab Manager from the Lead Partner and a Site Lab Manager from the Targeted Partner Rehabilitation → Threshold 70% → Senior Site Lab Manager from the Lead Partner and a Site Lab Manager from the Targeted Partner New Facilities → Threshold 70% → Senior Site Lab Manager from the Lead Partner and a Site Lab Manager from the Targeted Partner 5.13 The conditions stated in Clauses 5.13(a) to (f) of the Conditions of Tender as well as the following additional Clauses 5.13(g) to (i) shall be applied as objective criteria in terms of Section 2(1)(f) of the Preferential Procurement Policy Framework Act, 2000 and as compelling and justifiable reasons in terms of Conditions of Tender, Clause 5.11: The Lead Partner of the JV has a facility that is registered as a SANAS

accredited Civil Engineering Materials testing laboratory facility; and

	 h) Each partner or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; and i) Each partner has not abused the Employer's supply chain management system; and j) Each Partner has not failed to perform on any previous contract and has been given a written notice to this effect; and k) The JV shall comply with the requirements and definitions of SANS 10845 Part 6 – Participation of Targeted Partners in Joint Ventures in Contracts and the specific requirements as listed under clause 4.1.1 (a) above. l) SARS Tax compliance Tenderers, or in the event of a Joint Venture, each member of the Joint Venture, shall be tax compliant. Tenderers who are not compliant or become non-compliant during the tender evaluation period, shall become compliant within 7 (seven) working days of the date of being notified. Tenders received from such tenderers who are not tax compliant within 7 (seven) working days of being notified, will not be considered.
5.17	The Employer will provide one (1) signed contract document to the Service Provider.
5.19	All requests shall be in writing.
Additional cond	itions of tender clauses:
3.7	Jurisdiction Unless stated otherwise in the Tender Data, each tenderer and the Employer undertake to accept the jurisdiction of the law courts of the Republic of South Africa.

PART T2: RETURNABLE SCHEDULES

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

T.2.1 LIST OF RETURNABLE SCHEDULES

Notes to Tenderer:

- 1. Failure to fully complete the relevant returnable documents or to supply the requested information within 24 hours from when the request was made shall render such a Tender offer non-responsive.
- 2. Tenderers shall note that their signatures appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided, including the information provided by candidates proposed for the specified key positions.
- 3. Notwithstanding any check or audit conducted by, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a Tenderer. If subsequently any information is found to be incorrect such discovery shall be taken as wilful misrepresentation by that Tenderer to induce the contract. In such event the Employer has the discretionary right under contract condition 8.4 to terminate the contract.

PART T2: RETURNABLE SCHEDULES

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FORM A1: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to Tenderer:

1.	Unless the attendee's name, details and signature also appear on the attendance register this Certificate of Attendance shall not be accepted and the tenderer's offer shall be deemed non-responsive.
2.	Please original copy of completed and signed Certificate in tender
This	is to certify that I,
repre	sentative of (tenderer)
of (ad	ddress)
,	
tolon	hone number
-	
fax n	umber
	il
atten	ded the clarification meeting and on (date)
cond	ucted by the Employer with SANRAL
in the	presence of (Employer's representative)
in the	presence of (Employer's representative)
TEN	DERER'S REPRESENTATIVE (Signature)
EMP	LOYER'S REPRESENTATIVE (Signature)

FORM A1.1: CERTIFICATE OF INTENTION TO SUBMIT A TENDER

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to Tenderer:

- 1. The duly completed certificate of intention to submit a tender <u>must</u> be submitted by whoever intends to tender for this particular tender within seven (7) days from the date the tender is advertised. <u>Failure to submit the certificate of intention to tender within the required period may render the tenderer non-responsive and SANRAL does not accept responsibility for any communication not received by the tenderer timeously.</u>
- 2. Late notification of intention to tender by a prospective tenderer will not necessarily result in the tender closing date being extended.
- 3. Should you intend to submit a tender for this particular tender please sign the certificate, scan and email the completed document to the email address indicated in T1.1 of this tender document.
- 4. The Employer shall send all correspondence, including Addenda, only to the Tenderer's email address as provided herein.

This is to certify that I,
representative of (insert name of tenderer)
of (address)
telephone number
fax number
e-mail
intends to submit a tender in response to the tender notice and invitation for tender this contract.
TENDERER'S REPRESENTATIVE

FORM A2.1: CERTIFICATE OF AUTHORITY FOR SIGNATORY

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to tenderer:

- 1. The signatory for the tenderer shall confirm his/her authority thereto by attaching on the tendering company's letterhead a duly signed and dated copy of the relevant resolution of the board of directors/partners.
- 2. A certificate is required from each member of the joint venture clearly setting out:
 - authority for signatory,
 - undertaking to formally enter into a joint venture contract should an award be made to the joint venture,
 - name of designated lead member of the intended joint venture, as required by tender condition 4.1.1.
- 3. The resolution below is given as an example of an acceptable format for authorisation, but submission of this page with the example completed shall not be accepted as authorisation of the tenderer's signatory.

By resolution of	f the board of directors passed at a meeting	ng held on
Mr/Mswhose signatur tender for	e appears below, has been duly authoris	ed to sign all documents in connection with the
SUB-CONTRA	CTION 3, FROM GLADYS MANZI ROAD (Y FOR THE UPGRADING OF NATIONAL KM 5.9) TO NEW ENGLAND ROAD
and any contra	ct which may arise there from on behalf of	(enter name of tenderer in block capitals)
SIGNED ON BI	EHALF OF THE COMPANY:	
IN HIS/HER CA	APACITY AS:	
DATE:		
SIGNATURE C	F SIGNATORY:	
WITNESS:	SIGNATURE	SIGNATURE
	NAME (PRINT)	NAME (PRINT)

FORM A2.2: DECLARATION OF TENDERER'S CURRENT STATUS OF ANY DEBT OUTSTANDING TO SANRAL

2. A declaration is required from each member of the Joint Venture.

of August 1977 having been complied with.

COMMISSIONER OF OATHS

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to tenderer:

- 1. The signatory for the tenderer or RFQ as the case may be shall complete and sign this form declaring the current status of (any) debt outstanding to SANRAL.
- that: 1. the tenderer or any of its Directors/Members do not have any debt outstanding to SANRAL, other than what is listed below: Please provide the details: 2. the tenderer and/or any of its Directors/Members freely, voluntarily and without undue duress unconditionally authorises the SANRAL to set off any debts agreed to which is due and payable by the tenderer or any of its Directors/Members in terms of this declaration against any moneys due to the tenderer or any of its Directors/Members. 3. to the best of my knowledge the above information is true and accurate. Signed and sworn before me at_____ on the ____day of _____ The deponent having: 1. Acknowledge that he/she knows and understands the contents hereof; 2. Confirmed that he/she has no objection to the taking of the prescribed oath; and 3. That he/she considered the prescribed oath as biding upon her conscience; 4. The Regulations contained in the Government Gazette Notice R1258 of July 1972 and the R 1648

FORM A3.1 BIDDER'S DISCLOSURE (SBD 4)

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to tenderer:

Definitions:

- a. "State" means:
 - any National or Provincial Department, National or Provincial Public Entity or Constitutional Institution within the meaning of the Public Finance Management Act, 1999 (Act No 1 of 1999);
 - any Municipality of Municipal Entity;
 - Provincial Legislature;
 - National Assembly or the National Council of Provinces; or
 - Parliament.
- b. "Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.
- ii In the case of a joint venture (JV), a separate declaration form is to be completed and submitted by each JV member.

iiilf the Form is omitted or blank; or if the tenderer found to have failed to declare conflict or declare false information, The tender will be declared non-responsive and should it be discovered after the award of a contract, contract maybe terminated and tenderer will be ultimately restricted from doing business with the State.

1. PURPOSE OF THE FORM

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

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

2. BIDDER'S DECLARATION

- 2.1. Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**
- 2.1.1. If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

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

Full Name	Identity Number	Name of State Institution
having a control		nareholders / members / partners or any persone any interest in any other related enterprise
		20110
2.3.1. If so, furnish par	liculais.	
3. DECLARATION		
		in submitting statements that I certify to be true and complete
3.1 I have read and	d Lunderstand the contents of this	disclosuro:

- 3.2. I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4. In addition, there have been no consultations, communications, agreements or arrangements

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

with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit

or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

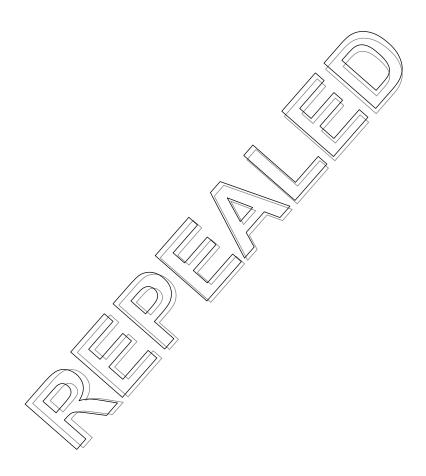
- 3.5. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.6. There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.7. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

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

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

Signature	Date
Position	Name of bidder

FORM A3.2: CERTIFICATE OF INDEPENDENT TENDER (INCORPORATING SBD9)



FORM A3.3: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (INCORPORATING SBD8)

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to tenderer:

- 1. This declaration:
 - (a) must form part of all tenders submitted.
 - (b) in the case of a joint venture (JV), must be completed and submitted by each member of the JV
- 2. This form serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse and/or misused the State's procurement of the supply chain management system.
- 3. The tender of any tenderer may be disregarded if that tenderer or any of its directors have -
 - (a) abused the institution's supply chain management system;
 - (b) committed fraud or any other improper conduct in relation to such State system;
 - (c) has been charged with fraud, corruption or any other improper conduct whether of a criminal or civil nature during the course and scope of rendering services to the state or any other party and/or entity; or
 - (d) failed to perform on any previous contract with the State.
- 4. In order to give effect to the above, the following questionnaire must be completed and submitted with this tender.

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

4.3.1	If Yes, furnish particulars:		
4.4	Was any contract between the tenderer and any organ of State terminated during the past five years on account of failure to perform on or comply with the contract?	Yes	No
4.4.1	If Yes, furnish particulars:		

CERTIFICATION

I, the undersigned,
certify that the information furnished on this declaration form is true and correct.
I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.
Signature:
Name:
Position:
Date:
Name of tenderer:

FORM A3.4: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

The tenderer shall provide a printed copy of the Active Supplier Listing on the National Treasury Central Supplier Database. (www.treasury.gov.za). Tenderers who are not registered on the Central Supplier Database should attach proof of their application for registration (refer to Tender Data Clause 4.1.1).

Each member of the JV, shall be registered on the National Treasury Central Supplier Database on the closing date for tender submissions. This registration shall be for the supply of the Commodity: Materials Testing, with in the Class: Quality Control from the Family: Manufacturing Technologies in the Segment: Engineering & Research & Technology Based Services.

A printed copy of the Active Supplier Listing must be provided for each member of the Joint Venture.

Name of Contractor (Lead Partner):

Central Supplier Database Supplier Number:
Expiry Date:
Name of Contractor (Targeted Partner):
Central Supplier Database Supplier Number:
Expiry Date:
SIGNED BY TENDERER:

FORM A3.5: JOINT VENTURE AGREEMENT

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

The tenderer shall attach a signed copy of the CIDB Joint Venture Agreement (March 2004) (First Edition of CIDB document 1017) to this form, which can be sourced from http://www.cidb.org.za/publications/Documents/Joint Venture Agreement.pdf .

Name of Contractor (Lead Partner):

Date:
Name of Contractor (Targeted Partner):
Date:

SIGNED BY TENDERER:

FORM A4: SCHEDULE OF VARIATIONS OR DEVIATIONS BY TENDERER

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to tenderer:

- 1. The postulated tender MUST be priced.
- 2. When submitting an alternative tender (including an alternative contract period), the contents of notes 5 and 6 under "Notes to tenderer" under Part T2: Returnable Schedules, shall be followed.
- 3. In addition, condition 4.12 of part T1.3: Tender Data, shall be followed when submitting an alternative/qualifying tender.

PAGE	DESCRIPTION

SIGNED ON BEHALF OF TENDERER:	 	

FORM A5: SCHEDULE OF ADDENDA TO TENDER DOCUMENTS

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

	We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:					
	DATE	TITLE OR DETAILS				
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

SIGNED	ON REHALF	OF THE 1	LENDEBER:		
		OI III		 	

FORM A6: CERTIFICATES OF TAX COMPLIANCE (INCORPORATING SBD2)

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

The tenderer shall attach to this page a current Tax Clearance certificate and VAT Registration certificate which shall be obtained by the tenderer from the South African Revenue Service (SARS).

Each member of the Joint Venture shall comply with the above requirement.

Where such certificates are no longer issued by SARS (as described in National Treasury Instruction Number 3 of 2014/2015 – Tax compliance measures for persons conducting business with the State), the Tenderer 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. For this purpose our unique security personal
identification number (PIN) is
SIGNED BY TENDEDED.

FORM A7: CERTIFICATE OF INSURANCE COVER

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Note to tenderer:

The details of the individual	members of the Joi	nt Venture must be	provided.

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

	i)	Name of Tenderer:
	ii)	Period of Validity:
	iii)	Value of Insurance:
		■ Professional Indemnity (for each and every case)
		Company:
		Value:
		 General public liability
		Company:
		Value:
		■ Third party liability
		Company:
		Value:
SIG	SNED OI	N BEHALF OF THE TENDERER:

FORM A8: TENDERER'S CREDIT RATING AND BANK DETAILS

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

- The tenderer shall attach to this form a letter from the bank at which he declares he conducts
 his account. The contents of the bank's letter must state the credit rating that the bank in
 addition to the information required below accords to the tenderer for the business envisaged
 by this tender. Failure to provide the required letter with the tender submission shall render
 the tenderer's offer non-responsive.
- 2. The tenderer's banking details as they appear below shall be completed.
- 3. Details of all the members of the joint venture shall be provided and attached to this form.

The tendere	er shall provide the following:
i)	Name of account holder:
ii)	Account number:
iii)	Bank name:
iv)	Branch number:
v)	Bank and branch contact details
-,	

	SIGNED	ON BEHALF OF	THE TENDERER:		
--	--------	--------------	---------------	--	--

FORM A9: CERTIFICATE OF TENDERER'S LITIGATION HISTORY

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Note to tenderer:

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

CLIENT	OTHER LITIGATING PARTY	DISPUTE	AWARD VALUE	DATE RESOLVED

SIGNED ON BEHALF OF THE TENDERER:	

FORM A10: SCHEDULE OF CURRENT COMMITMENTS

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

- 1. The purpose of this form is for the tenderer to identify areas of conflict with respect to key personnel proposed for this project. Failure to identify where areas of conflict occur, or may occur, and which are subsequently discovered by the Employer shall render such offer as non-responsive, rejected and the tenderer automatically barred from tendering on SANRAL projects for a period of at least 3 (three) months from the date of tender closure.
- 2. The tenderer shall list below all projects with which proposed personnel are currently involved.
- 3. The start date in column 4 of the table below is that date indicated in the tender documents as being the intended start of the duties of the key personnel (i.e. expected start of design or supervisory duties).
- 4. In the event of a joint venture enterprise, details of all the members of the joint venture shall similarly be attached to this form.

NAME & POSITION	PROJECT	CLIENT	START DATE (M/Y)	DURATION (MONTHS)	VALUE OF SERVICE

SIGNED ON BEHALF OF THE TENDERER:	 	

FORM A11: POSSIBLE COMMITMENTS OF KEY PERSONNEL

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

- 1. The purpose of this form is for the tenderer to identify areas of conflict with respect to <u>key</u> <u>personnel</u> proposed for this project.
- 2. The tenderer shall list below all projects/tenders for which the proposed core personnel have been proposed, and for which results of an award are unknown at the date of tender closure of this project.
- 3. The start date in column 4 of the table below is that date indicated in the tender documents as being the intended start of the duties of the key personnel (i.e. expected start of design or supervisory duties).
- 4. If during the evaluation of the tender submission the Employer learns that a proposed key person of the site supervisory staff is also part of a team which is in line for a possible award of one of the listed projects, then the Employer will afford that tenderer the opportunity to propose alternative personnel. Any alternative personnel will result in the re-assessment of the submission with respect to the quality proposal.

NAME & POSITION	PROJECT	CLIENT/ REGION	START DATE (M/Y)	DURATION (MONTHS)

SIC	SNED ON BEHALF OF THE TEN	IDERER:		
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FORM A12: CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014 AS WELL AS COID ACT, 1993

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

- 1. Discovery that the tenderer has failed to make proper disclosure may result in the Employer terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.
- 2. The tenderer shall attach to this form evidence that he is registered and in good standing with the Compensation Fund in terms of Section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).
- 3. The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 (thirty six) months preceding the date of the tender.

SIGNED ON BEHALF OF THE TENDERER: $_$	

FORM A13: TENDER'S B-BBEE VERIFICATION CERTIFICATE (INCORPORATING SBD6.1)

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Notes to Tenderer:

- The tenderer shall attach to this form a valid copy of the B-BBEE Verification Certificate issued in accordance with:
 - the amended Construction Sector Codes published in Notice 931 of 2017 of Government Gazette No 41287 on 1 December 2017 by the Department of Trade, Industry and Competition.
 - if the Measured Entity operates in more than one sector or sub-sector (e.g. Contractor or BEP) the scorecard for the sector or sub-sector in which the majority of its core activities (measured in terms of Annual Revenue) are located will be acceptable.

2. The certificate shall:

- have been issued by a Verification Agency accredited by the South African National Accreditation System (SANAS); or
- be in the form of a sworn affidavit (accompanied by a financial statement or management account on the latest financial year) or a certificate issued by the Companies and Intellectual Property Commission in the case of an Exempted Micro Enterprise (EME) with a total annual revenue of less than R1.8 million if issued in accordance with the amended Construction Sector Codes published in Notice 931 of 2017 of Government Gazette No 41287 on 1 December 2017 by the Department of Trade, Industry and Competition; OR be in the form of a sworn affidavit or a certificate issued by the Companies and Intellectual Property Commission in the case of an Exempted Micro Enterprise (EME) with a total annual revenue of less than R3 million if issued in accordance with the amended Construction Sector Codes published in Notice 931 of 2017 of Government Gazette No. 41287 on 1 December 2017 by the Department of Trade and Industry; and
- be valid at the tender closing date; and
- have a date of issue less than 12 (twelve) months prior to the tender closing date.
- 3. In the event of an un-incorporated Joint Venture (JV), a valid project specific (must contain a SANRAL contract number) consolidated B-BBEE Verification Certificate in the name of the JV shall be attached.
- 4. The attached Verification Certificate and the associated Assessment Report shall comply with the requirements of Tender Data, Clause C.3.11 and shall identify:
 - (a) The name and domicilium citandi et executandi of the tenderer.
 - (b) The registration and VAT number of the tenderer.
 - (c) The dates of granting of the B-BBEE score and the period of validity.
 - (d) The expiry date of the Verification Certificate.
 - (e) A unique identification number.
 - (f) The standard and/or normative document, including the issue and/or revision used to evaluate the tenderer.

- (g) The name and/or mark/logo of the B-BBEE Verification Agency.
- (h) The scorecard (GENERIC, QSE, Exempt) against which the tenderer has been measured.
- (i) The B-BBEE status level.
- (j) The South African National Accreditation System (SANAS) logo on the Verification Certificate once verification agencies have been accredited.
- (k) The B-BBEE procurement recognition level.
- (I) The score achieved per B-BBEE element.
- (m) The % black shareholding.
- (n) The % black women shareholding.
- (o) The % black persons with disabilities shareholding.
- (p) The % black youth shareholding.
- (q) the % black people living in rural or under-developed areas or townships share-holding.
- (r) The % black military veterans shareholding.
- (s) The value added status of the tenderer.
- 5. The Employer will not be responsible to acquire data that it needs for its own reporting systems and which may not form part of a Verification Agency's standard certificate format. The tenderer, at its own cost, must acquire the specified data listed in 3 above from its selected Verification Agency and have it recorded on the certificate. Alternatively, such missing data must be supplied separately, but certified as correct by the same Verification Agency and also attached to this form.
- 6. The tenderer will be declared non-responsive if:
 - a) The B-BBEE certificate is not submitted or submitted B-BBEE certificate that has expired or is not valid; or
 - b) The tenderer submits a B-BBEE certificated that does not comply with requirements (e.g. not SANAS); or
 - c) The tenderer submits the Scorecard assessment report only; or
 - d) In a case of a Joint Venture, the tenderer submits an unincorporated consolidated Joint Venture B-BBEE certificate which is not project specific; or
 - e) In a case of a Joint Venture, the tenderer submits an unincorporated consolidated Joint Venture B-BBEE certificate does not have a contract description and/or a tender number; or
 - f) A tenderer only submits 1 (one) B-BBEE certificate, where multiple tenders were issued by SANRAL; or
 - g) An EME (not start-up) submits a Sworn Affidavit with total revenue above R1.8 million instead of a B-BBEE certificate; or
 - h) A QSE submits a Sworn Affidavit instead of a B-BBEE certificate.
 - i) The Sworn Affidavit is not valid. A valid Sworn Affidavit must contain the following:
 - i. Name/s of deponent as they appear in the identity document and the identity number.

- ii. Designation of the deponent as either the director, owner or member must be indicated in order to know that person is duly authorised to depose of an affidavit.
- iii. Name of enterprise as per enterprise registration documents issued by the CIPC, where applicable, and enterprise business address.
- iv. Percentage black ownership, black female ownership and whether they fall within a designated group.
- v. Indicate total revenue for the year under review and whether it is based on audited financial statements or management accounts.
- vi. Financial year-end (day, month and year) as per the enterprise's registration documents, which was used to determine the total revenue.
- vii. B-BBEE status level. An enterprise can only have 1 (one) status level.
- viii. Date deponent signed and date of Commissioner of Oath must be the same.
 - ix. Commissioner of Oath cannot be an employee or ex-officio of the enterprise because, a person cannot by law, commission a sworn affidavit in which they have an interest.

j) A valid BBBEE Certificates shall contain:

- Name of enterprise as per enterprise registration documents issued by CIPC, and enterprise business address.
- Value-Added Tax number, where applicable.
- The B-BBEE Scorecard against which the certificate is issued, indicating all elements and scores achieved for each element. The actual score achieved must be linked to the total points as per the relevant Codes.
- B-BBEE status with corresponding procurement recognition level.
- The relevant Codes used to issue the B-BBEE verification certificate.
- Date of issue and expiry (e.g. 9 June 2018 to 8 June 2019). Where a measured entity was subjected to a re-verification process, due to material change, the B-BBEE Verification Certificate must reflect the initial date of issue, date of re-issue and the initial date of expiry. Re-verification does not extend the lifespan of the B-BBEE Verification Certificate.
- Financial period which was used to issue the B-BBEE Verification Certificate.

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

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 (SBD 6.1)

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

- a) The applicable preference point system for this tender is the 90/10 preference point system.
- b) The applicable preference point system for this tender is the 80/20 preference point system.
- c) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
 - (a) Price; and
 - (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	
SPECIFIC GOALS	
Total points for Price and Specific Goals	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

1. **DEFINITIONS**

- (a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to
 provide goods or services through price quotations, competitive tendering process or any other method
 envisaged in legislation;
- (b) "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts:
- (c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) "tender for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

2. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

80/20 or 90/10

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration
Pmin = Price of lowest acceptable tender

3. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
 - (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

The specific goals allocated points in terms of this tender	Criteria	Number of points allocated (90/10 system)	Number of points allocated (80/20 system)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
B-BBEE level scorecard of the tendering entity.	B-BBEE Level 1	10	20		
	B-BBEE Level 2	9	18		
	B-BBEE Level 3	6	14		
	B-BBEE Level 4	5	12		
	B-BBEE Level 5	4	8		
	B-BBEE Level 6	3	6		
	B-BBEE Level 7	2	4		
	B-BBEE Level 8	1	2		
	Non-compliant contributor	0	0		

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.

1.	DECLARATION WITH REGARD TO COMPANY/FIRM	
5.1.	Name of company/firm	
5.2.	Company registration number:	
5.3.	TYPE OF COMPANY/ FIRM	
	Υ	Partnership/Joint Venture / Consortium
	Υ	One-person business/sole propriety
	Υ	Close corporation

î (Pty) Limited

Non-Profit Company

Public Company

Personal Liability Company

State Owned Company

[TICK APPLICABLE BOX]

- 5.3. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:
 - i) The information furnished is true and correct;
 - ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form:
 - iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
 - iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have —
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

	SIGNATURE(S) OF TENDERER(S)
SURNAME AND NAME:	
DATE:	
ADDRESS:	

B-BBEE EXEMPTED AFFIDAVIT FOR EXEMPTED MICRO ENTERPRISES (ISSUED IN TERMS OF THE AMENDED CONSTRUCTION SECTOR CODE) (Gazette Vol. 630 No. 41287)

Issued in terms of paragraph 3.6.2.4.1 (B)

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٠,	1110	unuo	Oldi	iou.

Full names and surname	
Identity number	

Hereby declare under oath as follows:

- The contents of this statement are to the best of my knowledge a true reflection of the facts.

 Lam a Member / Director / Owner of the following enterprise and am duly authorized to act on its behalf:

Enterprise Name:			
Trading Name (If Applicable):			
Registration Number:			
Physical Address:			
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):			
Nature of Construction Business: Indicate the applicable category with a tick.	BEP (Built Environment Professional)	Contractor	Supplier
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians — who are citizens of the Republic of South Africa by birth or descent; or who became citizens of the Republic of South Africa by naturalization before 27 April 1994; or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date:"		
Definition of "Black Designated Groups"	"Black Designated Groups" means: unemployed black people not attending ar educational institution and not awaiting ad Black people who are youth as defined in Black people who are persons with disabil on employment of people with disabilities Black people living in rural and under deve Black military veterans who qualifies to be Military Veterans Act 18 of 2011;"	mission to an education the National Youth Corities as defined in the Coissued under the Employleoped areas;	nal institution; nmission Act of 1996; Code of Good Practice oyment Equity Act;

 I hereby declare under Oath that as per Amended Code Series 100 of the Amended Codes of Good Practice issue section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013, 			
•	The Enterprise is	% Black Owned	
•	The Enterprise is	% Black Female Owned	
•	The Enterprise is	% Owned by Black Designated Group (provide Black Designated Group Breakdown below table above)	as
	 Black Yout 	%	
	 Black Disal 	1%	
	 Black Uner 	byed %	
	 Black Peop 	iving in Rural areas %%	
		Veterans %%	

•	Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of
	, the annual Total Revenue was less than the applicable amount confirmed by ticking
	the applicable box below.

BEP	R1.8 million	
Contractor	R3.0 million	
Supplier	R3.0 million	

If the turnover exceeds the applicable amount in the table above then this affidavit is no longer applicable and an EME certificate must be obtained from a rating agency accredited by SANAS or when applicable a B-BBEE Verification Professional Regulator appointed by the Minister of Trade and Industry.

• Please Confirm on the below table the B-BBEE Level Contributor, by ticking the applicable box below.

100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned	Level Two (125% B-BBEE procurement recognition level)	
At least 30% Black Owned	Level Four (100% B-BBEE procurement recognition level)	
Less than 30% Black Owned	Level Five (80% B-BBEE procurement recognition level)	

- 3. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the Owners of the Enterprise which I represent in this matter.
- 4. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

	Deponent Signature:
	Date:
Commissioner of Oaths Signature & stamp	

FORM A14: FORM SBD1 – INVITATION TO BID AND TERMS AND CONDITIONS FOR BIDDING

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

PART A

INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)										
BID NUMBER:	N.003-	030-2017/8 C-SL	CLOSING DATE:	18 th AUGUS	ST 2023 CLOS	ING TIM	E: 10:00			
DESCRIPTION		ONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, DN 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)								
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)										
The Reception Area The South African National Roads Agency SOC Ltd, Eastern Region 58 Van Eck Place, Mkondeni Pietermaritzburg, 3204										
BIDDING PROCEDURE EN	BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO TECHNICAL ENQUIRIES MAY BE DIRECTED TO:									
CONTACT PERSON		Marshall Muthen	l.	CONTACT	PERSON	Marsh	all Muthen			
TELEPHONE NUMBER		N/A		TELEPHON	IE NUMBER	+27 11	361-1478			
FACSIMILE NUMBER		N/A		FACSIMILE	NUMBER	NO CH	HANGE REQUIRED			
E-MAIL ADDRESS		marshall.muther	@wsp.com	E-MAIL ADI	DRESS	marsh	all.muthen@wsp.com			
SUPPLIER INFORMATION	Т									
NAME OF BIDDER										
POSTAL ADDRESS										
STREET ADDRESS				1						
TELEPHONE NUMBER		CODE		NUMBER						
CELLPHONE NUMBER				_			<u></u>			
FACSIMILE NUMBER		CODE		NUMBER						
E-MAIL ADDRESS										
VAT REGISTRATION NUME	BER									
SUPPLIER COMPLIANCE STATUS		TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA				
ARE YOU THE ACCREDITE REPRESENTAT IN SOUTH AFRI FOR THE GOOD /SERVICES OFFERED?	□Yes [IF YES ENCLOS	□No E PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?			☐YeS ☐No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]				
QUESTIONNAIRE TO BIDD	ING FOR	REIGN SUPPLIERS	5							
US THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? DOES THE ENTITY HAVE A BRANCH IN THE RSA? DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.										

PART B

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

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

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

FORM A15: BLACK OWNERSHIP DECLARATION

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

- Verification of ownership will be based on share certificate. SANRAL reserves the right to engage
 with the shareholders. In the event of any difference between the percentage ownership claimed
 below and the percentage ownership as per the share certificate, the share certificate shall apply.
- · Attach share certificate/s

No.	Name and Surname	Percentage	
	Additional table may be submitted if the		
	space provided is insufficient		
Total	% black ownership		·

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

Signature	Date
Position	Name of hidder

FORM A16: SUB-CONTRACTING DECLARATION

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

TOTAL SUB-CONTRACTING TO TARGETED ENTERPRISES PERCENTAGE (%)	%
•I CERTIFY THAT THE INFORMATION FURNISHED	ABOVE IS CORRECT.

-														— .														
•	ΑC	CCE	РΤ	TH	ΑТ	THE	5	TAT	Έ	MA'	ΥF	REJ	ECT	Т	ΗE	BID	OF	RA	СТ	AG	AIN	ST	ME	IN	Т	ERMS	S	ЭF
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BE FALSE.

Signature Date

Position Name of bidder

FORM B1: TECHNICAL AND MANAGERIAL ASPECTS OF SITE LABORATORY MANAGER

CONTRACT SANRAL N.003-030-2017/8 (SUB-CONTRACT FOR SITE MATERIALS (KM 5.9) TO NEW ENGLAND ROAD INTE	LABORATORY FOR THE UP	PGRADING OF NATIONAL ROUTE 3, SECTION 3	, FROM GLADYS MANZI ROAD
Name			
HIGHEST SECONDARY OR TERTIARY QUALIFICATION	DATE GRADUATED	CERTIFIED COPY OF QUALIFICATION ATTACHED NOTE TO TENDERER: MARK IN BOX BELOW IF COPY IS ATTACHED	
		OOI TIS ATTACHED	
YEARS OF RELEVANT EXPERIENCE	EXPERIENCE	ROM CANDIDATE TO CONFIRM YEARS OF RELEVANT MARK IN BOX BELOW IF RÉSUMÉ IS ATTACHED	

Technical/Managerial Experience

Note to Tenderer: 1) The candidate shall list the projects and time in commercial lab or any other work chronologically in the table below

2) The Position of Senior Site Laboratory Manager requires a 10 (ten) year period and the Position of a Site Laboratory Manager requires a period of 5 (five) year to be fully described in the table.

CLIENT & PROJECT LABORATORY TYPES NO (Note 1) (Note 2)				RELEVANT EXPERIENCE	RELEVANT EXPERIENCE	POSITION HELD (NOTE 5)	CONTACT PERSON AND POSITION (NOTE 6)	CONTACT NO.	
	GR	AS	SE	CO	STARTED (NOTE 3) ENDED (NOTE 4)				

	COMPLETED THE LABORAT SED ON ISO 17025 PRESEN			IS THE CANDIDATE ACCREDI	E A TECHNICAL SI TED LABORATORY		ANAS	
Yes	No			Yes		No		
IF YES, ATTACH A CE	RTIFIED COPY OF CERTIFIC.	ATE		IF YES, ATTACH C ACCREDI		F SANAS SCHED	ULE OF	
	schedule of accreditation			from Number suppl		,		
	rm by my signature her responsibilities are truly		•	ided herein is true	, that the positi	ons occupied,	the projects rep	orted and
SIGNATURE OF CA	NDIDATE:		DATE					

- 1. The Client shall be the relevant authority for which the works were completed and NOT the supervising consultant or contractor, this could for example be SANRAL, or DRPW (Eastern Cape) or ESKOM, or Tshwane Metropolitan Municipality etc.
- 2. The candidate shall mark the laboratory type or types for which he/she was responsible in the time period, with GR being a Soils and Gravels lab type, AS being an asphalt lab type, SE being a Seals lab type and CO being a Concrete lab type.
- 3 Month and Year for the start of the relevant experience. This in relevant dates for the candidate and shall be limited to the direct involvement of the candidate.
- 4. Month and Year for the end of the relevant experience. This in relevant dates for the candidate and shall be limited to the direct involvement of the candidate and shall not extend into the future. Is the project claimed is ongoing; the date of this tender shall be supplied as the end of experience date.
- 5. Refer to abbreviation in the list below for positions held. Any position indicated on the form that is not covered in the list below shall render the experience to NOT contribute to the total score for the candidate
- 6. Provide contact persons that will be able to verify the candidate's experiences and their role in the specific project or working environment. It should be noted that the personnel from the consulting engineer with which the candidate had worked on site may be more relevant than the project manager for the project from the roads authority. Should the contact person not be in a position to confirm any or all the information related to the period, the period will not contribute towards the candidates score.

POSITIONS (NOTES 5)	ABBREVIATION
Senior Laboratory Manager	SLM
Laboratory Manager	LM
Junior Laboratory Manager	JLM
Trainee Site Laboratory Manager	TLM
General Manager of a Commercial lab	GMcom
Senior Laboratory Manager in Commercial lab	SLMcom
Laboratory Manager in Commercial lab	LMcom
Trainee Laboratory Manager in Commercial lab	TLMcom
Senior Materials Tester	SMTest
Materials Tester	MTest
Assistant Materials Tester	AMTest
Resident engineer	RE
Assistant resident engineer	ARE
Senior Materials Technician	SMT
Materials Technician	MT

PROCEDURE FOR EVALUATION OF FORM B1:

- The following is used in the Quality Points evaluation
 - Technical/Managerial Experience (20 points)
 - Laboratory Systems Course based of ISO17025 presented by SANAS (5 points)
 - Technical Signatory of the tendering Main Laboratory (5 points)

A) The procedure for scoring the Technical/Managerial Experience shall be done as follows:

- Step 1. For each complete line, determine the time claimed in each completed line in <u>Technical/Managerial Experience</u> table. If a date is provided that is beyond the date of tender closure, the date of tender closure shall be used as the end date for the line of experience. The time shall be determined in calendar days.
- Step 2. Determine the total time covered in the table by adding together the time for each line. The total time covered shall not be the date of tender closure minus the earliest date in the table. Should the total time for a Senior Laboratory Manager be less the 3650 days, 3650 days will be used in Step 3 instead of the total time determined in Step 2.
- Step 3. For each line item, allocate a weighted line score by dividing the number of days for the line (from Step 1) by the total time in days (from Step 2). Then multiply each fraction by 20.
- Step 4. Allocate the factor from table B1-E1 below for Client to each line item:

TABLE B1-E1: CLIENT FACTORS:

CLIENT	FACTOR
SANRAL or One of the 9 RSA Province's departments responsible for the Province's roads	1.00
Toll-Concessioners on SANRAL Toll-Network	0.80
One of the 9 Metropolitan Municipalities Roads and Streets Departments	0.80
Any other client than listed in the three lines of the table above	0.60
Time in Commercial Laboratory (Various Clients)	0.60

Step 5. Apply the factor from Step 4 to the line score (from Step 3)

Step 6. Allocate the factor from table B2-E2 below for Position to each line item. If the B1 form was required for a Senior Lab Manager, use the factor in the Senior Laboratory Manager column. If the B1 form was required for a Lab Manager, use the factor in the Laboratory Manager column.

TABLE B1-E2: POSITION FACTOR

POSITION CODE	POSITION	SENIOR LAB MANAGER	LAB MANAGER
SLM	Senior (Site) Laboratory Manager	1.00	1.20
LM	(Site) Laboratory Manager (Previously Junior Lab Manager)	0.80	1.00
JLM	Junior Laboratory Manager	0.80	1.00
TLM	Trainee Site Laboratory Manager	0.60	0.80
GMCom	General Manager of a Commercial lab	1.20	1.40
SLMComm	Senior Laboratory Manager in Commercial lab	0.90	1.10
LMComm	Laboratory Manager in Commercial lab	0.70	0.90
TLMComm	Trainee Laboratory Manager in Commercial lab	0.50	0.70
SMTest	Senior Materials Tester	0.60	0.80
MTest	Materials Tester	0.40	0.60
AMTest	Assistant Materials Tester	0.20	0.40
RE	Resident Engineer	1.00	1.20
ARE	Assistant Resident Engineer	1.00	1.20
SMT	Senior Materials Technician	1.20	1.40
MT	Materials Technician	1.00	1.20
	Any other, e.g. Site Agent, Contracts Engineer	0.00	0.00

Step 7. Apply the factor from Step 6 to the line score (from Step 5)

Step 8. Tally up the line scores from Step 7 to determine the total score for experience. Should the total be in excess of 20 points, carry a score of 20 points forward.

B) The procedure for scoring the Laboratory Systems Course based of ISO17025 presented by SANAS shall be done as follows:

Step 1. Score 5 points if the candidate has completed the course at SANAS and had provided proof. NO other training institution's course shall be accepted.

C) The procedure for scoring the Technical Signatory of the tendering Main Laboratory shall be done as follows:

Step 1. Score 5 points if the candidate is proved to be a technical signatory of the tendering main laboratory. Proof is submitted by means of the candidate's name appearing as a technical signatory on the Schedule of Accreditation from an accredited laboratory.

FINAL SCORE CALCULATION:

The scores for Technical/Managerial Experience, Laboratory Systems Course based of ISO17025 presented by SANAS and Technical Signatory of the tendering Main Laboratory are added together to calculate the total score for Form B1.

FORM B2: TECHNICAL AND MANAGERIAL ASPECTS OF QUALITY ASSURANCE MANAGER

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL

SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

INAME	DATE OF BIRTH	
YEARS OF RELEVANT EXPERIENCE	RÉSUMÉ ATTACHED FROM CANDIDATE TO CONFIRM Y	 EARS OF
	RELEVANT EXPERIENCE	_
	NOTE TO TENDERER: MARK IN BOX BELOW IF RÉSUM	É IS ATTACHED

DATE OF BIRTH

HAS THE CANDIDATE COMPLETED THE LABORATORY SYSTEMS COURSE BASED ON ISO 17025 PRESENTED BY SANAS					
YES NO					
IF YES, ATTACH COPY OF CERTIFICATE					

^{*}NOT PART OF QUALITY EVALUATION (REFER TO CLAUSE 4.1.1, TENDER DATA)

HAS THE CANDIDATE COMPLETED THE INTERNAL AUDITING COURSE BASED ON ISO 17025 PRESENTED BY SANAS				
YES NO				
IF YES, ATTACH COPY OF CERTIFICATE				

^{*}NOT PART OF QUALITY EVALUATION (REFER TO CLAUSE 4.1.1, TENDER DATA)

Technical/Managerial Experience

NAME

LABORATORY OR EMPLOYER	ACCREDITATION NUMBER	RELEVANT EXPERIENCE IN YEARS	POSITION HELD 5)	CONTACT PERSON AND POSITION	CONTACT NO.

LABORATORY OR EMPLOYER	ACCREDITATION NUMBER	RELEVANT EXPERIENCE IN YEARS	POSITION HELD	5)	CONTACT PERSON A POSITION	AND CONTAC	т No.	
TECHNIQUE	S COURSE BASED ON IS						-	
YES	No			YES		No		
IF YES, ATTACH COP	THE CANDIDATE COMPLETED THE TECHNICAL ASSESSING TECHNIQUES COURSE BASED ON ISO 17025 PRESENTED BY SANAS No S, ATTACH COPY OF CERTIFICATE S Facility Accreditation Number icated in the schedule of accreditation T							
-		tion T (N	May NOT differ fro	om the Num	nber supplied on Fo	rms C1 & C2)		
I declare and confirn	n by my signature here	eto that the information pro	ovided herein is tr	rue				
SIGNATURE OF CA	NDIDATE:	D	ATE					

PROCEDURE FOR EVALUATION OF FORM B2:

- The following is used in the Quality Points evaluation:
 - Technical Assessing Techniques Course based on ISO 17025 presented by SANAS (5 points)
 - A Technical Signatory or the nominated representative of the tendering Main Laboratory (5 points, should the person be both, a max. of 5 points is awarded)
 - Previous Applicable Experience in a Civil Materials Laboratory (max. 10 points available)

A) The procedure for scoring the Technical Assessing Techniques Course based on ISO17025 presented by SANAS shall be done as follows:

Step 1. Score 5 points if the candidate has completed the course at SANAS and had provided proof. NO other training institution's course shall be accepted.

B) The procedure for scoring the Technical Signatory of the tendering Main Laboratory shall be done as follows:

Step 1. Score 5 points if the candidate is proved to be a technical signatory of the tendering main laboratory. Proof is submitted by means of the candidates name appearing as a technical signatory on the Schedule of Accreditation of the main laboratory.

C) The procedure for scoring the additional relevant experience shall be as follows:

Step1. Score the candidate according to Table B2-E1. The candidate may only claim a maximum of 10 (ten) points, as listed.

TABLE B2-E1: EXPERIENCE POINTS

RELEVANT EXPERIENCE (YEARS)	NUMBER OF POINTS
8	0
9	1
10	2
11	3
12	4
13	5
14	6
15	7
16	8
17	9
18 or more	10

FINAL SCORE CALCULATION:

The scores for Technical Assessing Techniques Course based of ISO17025 presented by SANAS, Technical Signatory of the tendering Main Laboratory, Previous experience as a Laboratory Manager and Previous experience as a Senior Materials Tester are added together to calculate the total score for Form B2

FORM C1: QUALITY ASSURANCE MANAGEMENT SYSTEM'S COVERAGE OF TEST METHODS IN THE MAIN LABORATORY

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

SANAS Facility Accreditation Number	Т
As indicated in the schedule of accreditation	•

- 1. The tenderer shall select one SANAS Accredited Facility (also referred to the Main Accredited Laboratory) and indicate tests on the table for quality score evaluation.
- 2. A certified copy of the Tenderer's SANAS ISO 17025 Accreditation Certificate shall be attached to this page including the schedule of accreditation.
- 3. Please tick the tests for which the tenderer is accredited for. This information is deemed to be material to the award of the Contract as it will lead to the assignment of Points used in the quality score evaluation (refer to 5.11.9)
- 4. The test method number shall be determinate in any ambiguity.

	DESCRIPTION	TEST METHOD
1	Sampling of Road Pavement Layers	TMH5 MA2 or MC1
2	Sampling from Stockpiles	TMH5 MB1
3	Sampling of Bituminous Binders	TMH5 MB4
4	Sampling of Previously Blended (ready mixed) Asphalt	TMH5 MB7
5	Sampling of Slurry Mixtures	TMH5 MB8
6	Sampling of Freshly Mixed Concrete	TMH5 MB9
7	Sampling of Treated Pavement Layers	TMH5 MB10
8	Sampling of Asphalt or Concrete from completed layer or structure	TMH5 MC2
9	Sampling and Sample Preparation of Modified Binders	TG1 MB1 and MB2
10	Division of a Sample Using the Riffler or by Quartering	TMH5 MD1 or MD2
11	Making of asphalt briquettes for Marshall tests and other specialized tests	SANS 3001-AS1
12	Wet preparation and air-drying of samples for plasticity index and hydrometer tests	SANS 3001-GR5
13	Particle size analysis of aggregates by sieving	SANS 3001-AG1
14	Determination of the average least dimension of aggregates by direct measurement	SANS 3001-AG2
15	Determination of the flakiness index of coarse aggregate	SANS 3001-AG4
16	Sand equivalent value of fine aggregates	SANS 3001-AG5
17	ACV (aggregate crushing value) and 10% FACT (fines aggregate crushing test) values of coarse aggregates	SANS 3001-AG10
18	Polished-stone value of aggregates	SANS 3001-AG11

	DESCRIPTION	TEST METHOD
19	Determination of the bulk density, apparent density and water absorption of aggregate particles retained on the 5 mm sieve for road construction materials	SANS 3001-AG20
20	Determination of the bulk density, apparent density and water absorption of aggregate particles passing the 5 mm sieve for road construction materials	SANS 3001-AG21
21	Apparent density of crushed stone base	SANS 3001-AG22
22	Determination of Marshall stability, flow and quotient	SANS 3001-AS2
23	Determination of bulk density and void content of compacted asphalt	SANS 3001-AS10
24	Determination of the maximum void-less density of asphalt mixes and the quantity of binder absorbed by the aggregate	SANS 3001-AS11
25	Determination of the soluble binder content and particle size analysis of an asphalt mix	SANS 3001-AS20
26	Determination of the binder content of mixtures used in bituminous slurry seals	SANS 3001-AS22
27	Determination of the in situ permeability of a bituminous surfacing (Marvil test)	SANS 3001-BT12
28	Standard Test Method for Penetration of Bituminous Materials	ASTM D5 or EN1426
29	Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)	ASTM D36
30	Standard Test Method for Viscosity Determinations (HAAKE)	ASTM D4402
31	Ball penetration test for the design of surfacing seals	SANS 3001-BT10
32	Texture depth measurement for the design of surfacing seals	SANS 3001-BT11
33	Measurement of transverse distribution ('Bucket test') for a binder distributor	SANS 3001-BT24
34	Wet preparation and particle size analysis	SANS 3001-GR1
35	Determination of the one-point liquid limit, plastic limit, plasticity index and linear shrinkage	SANS 3001-GR10
36	Determination of the liquid limit with the two-point method	SANS 3001-GR11
37	Determination of the flow curve liquid limit	SANS 3001-GR12
38	Determination of the moisture content by oven- drying	SANS 3001-GR20
39	Determination of the maximum dry density and optimum moisture content	SANS 3001-GR30
40	Determination of the maximum dry density and optimum moisture content of laboratory mixed cementitiously stabilized materials	SANS 3001-GR31
41	Determination of the California bearing ratio	SANS 3001-GR40
42	Preparation, compaction and curing of specimens of laboratory mixed cementitiously stabilized materials	SANS 3001-GR50
43	Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum moisture content	SANS 3001-GR51

	DESCRIPTION	TEST METHOD	
44	Determination of the unconfined compressive strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR53	
45	Determination of the indirect tensile strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR54	
46	Determination of the wet-dry durability of compacted and cured specimens of cementitiously stabilized materials by hand brushing	SANS 3001-GR55	
47	Determination of the initial stabilizer consumption of soils and gravels	SANS 3001-GR57	
48	Determination of in situ density using a nuclear density gauge	SANS 3001-NG5	
49	Consistence of freshly mixed concrete - Slump test	SANS 5862-1	
50	Making and curing of test specimens and Compressive strength of hardened concrete	SANS 5861-3 and SANS 5863	

<u>CALCULATIONS OF QUALITY SCORE FOR ACCREDITED TESTS: (SEE 5.11.9 Tender Data)</u>

Number of Tests claimed from Form C1 (Check on Tenderers' Accreditation Schedule) 50	X	20	= points awarded
SCORE CLAIMED:			
SIGNED ON BEHALF OF THE TENDERER:			

PROCEDURE FOR EVALUATION OF FORM C1:

- The following is used in the Quality Points evaluation
- Compare form C1 with the tenderer's SANAS Schedule of Accreditation and make sure
 that all the test methods claimed on form C1 appear on the Schedule of Accreditation. If
 tests are claimed that does not appear on the Schedule of Accreditation, they shall be
 taken off the total number on form C1. Should tests appear on the Schedule of
 Accreditation and was not claimed by the tenderer on form C1, the total number of tests
 shall NOT be added.
- The total number of tests is divided by 50 and multiplied by 20 to calculate the total score for Form C1.

FORM C2: QUALITY ASSURANCE MANAGEMENT SYSTEM'S COVERAGE OF PROJECT SPECIFIC TEST METHODS IN THE MAIN LABORATORY

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

SANAS Facility Accreditation Number	т
As indicated in the schedule of accreditation	•

Note to Tenderer:

- 1. The tenderer shall select one SANAS Accredited Facility (also referred to the Main Accredited Laboratory) and indicate tests on the table for quality score evaluation.
- 2. A certified copy of the Tenderer's SANAS ISO 17025 Accreditation Certificate shall be attached to this page including the schedule of accreditation.
- 3. Please tick the tests for which the tenderer is accredited for. This information is deemed to be material to the award of the Contract as it will lead to the assignment of Points used in the quality score evaluation (refer to 5.11.9)
- 4. The test method number shall be determinate in any ambiguity.

	DESCRIPTION	TEST METHOD
1	Sampling of Road Pavement Layers	TMH5 MA2 or MC1
2	Sampling from Stockpiles	TMH5 MB1
3	Sampling of Bituminous Binders	TMH5 MB4
4	Sampling of Previously Blended (ready mixed) Asphalt	TMH5 MB7
5	Sampling of Slurry Mixtures	TMH5 MB8
6	Sampling of Freshly Mixed Concrete	TMH5 MB9
7	Sampling of Treated Pavement Layers	TMH5 MB10
8	Sampling of Asphalt or Concrete from completed layer or structure	TMH5 MC2
9	Sampling and Sample Preparation of Modified Binders	TG1 MB1 and MB2
10	Division of a Sample Using the Riffler or by Quartering	TMH5 MD1 or MD2
11	Making of asphalt briquettes for Marshall tests and other specialized tests	SANS 3001-AS1
12	Particle size analysis of aggregates by sieving	SANS 3001-AG1
13	Determination of the average least dimension of aggregates by direct measurement	SANS 3001-AG2
14	Determination of the flakiness index of coarse aggregate	SANS 3001-AG4
15	Sand equivalent value of fine aggregates	SANS 3001-AG5
16	ACV (aggregate crushing value) and 10% FACT (fines aggregate crushing test) values of coarse aggregates	SANS 3001-AG10
17	Apparent density of crushed stone base	SANS 3001-AG22
18	Determination of Marshall stability, flow and quotient	SANS 3001-AS2
19	Determination of bulk density and void content of compacted asphalt	SANS 3001-AS10
20	Determination of the maximum void-less density of asphalt mixes and the quantity of binder absorbed by the aggregate	SANS 3001-AS11

	DESCRIPTION	TEST METHOD
21	Determination of the in situ permeability of a bituminous surfacing (Marvil test)	SANS 3001-BT12
22	Standard Test Method for Penetration of Bituminous Materials	ASTM D5 or EN1426
23	Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)	ASTM D36
24	Standard Test Method for Viscosity Determinations (HAAKE)	ASTM D4402
25	Wet preparation and particle size analysis	SANS 3001-GR1
26	Determination of the liquid limit with the two-point method	SANS 3001-GR11
27	Determination of the flow curve liquid limit	SANS 3001-GR12
28	Determination of the moisture content by oven-drying	SANS 3001-GR20
29	Determination of the maximum dry density and optimum moisture content	SANS 3001-GR30
30	Determination of the maximum dry density and optimum moisture content of laboratory mixed cementitiously stabilized materials	SANS 3001-GR31
31	Determination of the California bearing ratio	SANS 3001-GR40
32	Preparation, compaction and curing of specimens of laboratory mixed cementitiously stabilized materials	SANS 3001-GR50
33	Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum moisture content	SANS 3001-GR51
34	Determination of the unconfined compressive strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR53
35	Determination of the indirect tensile strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR54
36	Determination of the wet-dry durability of compacted and cured specimens of cementitiously stabilized materials by hand brushing	SANS 3001-GR55
37	Determination of the initial stabilizer consumption of soils and gravels	SANS 3001-GR57
38	Determination of in situ density using a nuclear density gauge	SANS 3001-NG5
39	Consistence of freshly mixed concrete - Slump test	SANS 5862-1
40	Making and curing of test specimens and Compressive strength of hardened concrete	SANS 5861-3 and SANS 5863

<u>CALCULATIONS OF QUALITY SCORE FOR ACCREDITED TESTS: (SEE 5.11.9 Tender Data)</u>

Number of Tests claimed from Form C2				
(Check on Tenderers' Accreditation Schedule)	Χ	30	= points awarded	
(Number of Project Specific Tests)			·	
, , , ,				
SCORE CLAIMED:				
SIGNED ON BEHALF OF THE TENDERER:				

PROCEDURE FOR EVALUATION OF FORM C2:

- The following is used in the Quality Points evaluation
- Compare form C2 with the tenderer's SANAS Schedule of Accreditation and make sure
 that all the test methods claimed on form C2 appear on the Schedule of Accreditation. If
 tests are claimed that does not appear on the Schedule of Accreditation, they shall be
 taken off the total number on form C2. Should tests appear on the Schedule of
 Accreditation and was not claimed by the tenderer on form C2, the total number of tests
 shall NOT be added.
- The total number of tests is divided by project specific total number of tests and multiplied by 30 to calculate the total score for Form C2.

FORM D1: SCHEDULE OF RETURNABLE DOCUMENTS

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

Note to tenderer:

This form has been created as an aid to ensure a tenderer's compliance with the completion of the returnable forms and schedules and subsequent placement in the correct envelope.

CLAUSE NO	FORM DESCRIPTION	TICK IF COMPLETED
T2.1	FORM A1:CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING	
T2.1	FORM A1.1: CERTIFICATE OF INTENTION TO SUBMIT A TENDER	
T2.1	FORM A2.1: CERTIFICATE OF AUTHORITY FOR SIGNATORY	
T2.1	FORM A2.2: DECLARATION OF TENDERER'S CURRENT STATUS OF ANY DEBT OUTSTANDING TO SANRAL	
T2.1	FORM A3.1 BIDDER'S DISCLOSURE (SBD 4)	
T2.1	FORM A3.2: CERTIFICATE OF INDEPENDENT TENDER (INCORPORATING SBD9)	
T2.1	FORM A3.3:DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (INCORPORATING SBD8)	
T2.1	FORM A3.4:REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE	
T2.1	FORM A3.5:JOINT VENTURE AGREEMENT	
T2.1	FORM A4:SCHEDULE OF VARIATIONS OR DEVIATIONS BY TENDERER	
T2.1	FORM A5:SCHEDULE OF ADDENDA TO TENDER DOCUMENTS	
T2.1	FORM A6: CERTIFICATES OF TAX COMPLIANCE (INCORPORATING SBD2)	
T2.1	FORM A7:CERTIFICATE OF INSURANCE COVER	
T2.1	FORM A8:TENDERER'S CREDIT RATING AND BANK DETAILS	
T2.1	FORM A9:CERTIFICATE OF TENDERER'S LITIGATION HISTORY	
T2.1	FORM A10:SCHEDULE OF CURRENT COMMITMENTS	
T2.1	FORM A11:POSSIBLE COMMITMENTS OF KEY PERSONNEL	
T2.1	FORM A12:CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014 AS WELL AS COID ACT, 1993	
T2.1	FORM A13:TENDER'S B-BBEE VERIFICATION CERTIFICATE (INCORPORATING SBD6.1)	
T2.1	FORM A14: FORM SBD1 – INVITATION TO BID AND TERMS AND CONDITIONS FOR BIDDING	
T2.1	FORM A15: BLACK OWNERSHIP DECLARATION	
T2.1	FORM A16: SUB-CONTRACTING DECLARATION	

T2.1	FORM B1:TECHNICAL AND MANAGERIAL ASPECTS OF SITE LABORATORY MANAGER	
T2.1	FORM B2:TECHNICAL AND MANAGERIAL ASPECTS OF QUALITY ASSURANCE MANAGER	
T2.1	FORM C1:QUALITY ASSURANCE MANAGEMENT SYSTEM'S COVERAGE OF TEST METHODS IN THE MAIN LABORATORY	
T2.1	FORM C2:QUALITY ASSURANCE MANAGEMENT SYSTEM'S COVERAGE OF PROJECT SPECIFIC TEST METHODS IN THE MAIN LABORATORY	
T2.1	FORM D1:SCHEDULE OF RETURNABLE DOCUMENTS	
C1.1.1	C1.1.1FORM OF OFFER (INCORPORATING SBD7)	
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SIGNED	ON BEHAL	F OF THE 1	TENDERER:	

PART C1: AGREEMENTS AND CONTRACT DATA

PART C1: AGREEMENTS AND CONTRACT DATA

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Notes to Tenderer

1. 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)

WSP Group Africa (Pty) Ltd Building 1, Maxwell Office Park Magwa Crescent West Waterfall City Midrand, 1685

Sir.

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

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

FORWARD FROM PART C2.2: I	•	BROUGHT
(R	in figures)	

THE OFFEREN TOTAL OF THE PRICES (INCLUSIVE OF VALUE ARRED TAY) PROJECT

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.

Furthermore, I/we understand that failure or omission to complete the offer in words and/or figures or sign this form shall render my/our offer non-responsive and not correctable.

B. PREFERENCE CLAIMED

I/we claim the following B-BBEE contributor status level as per Returnable Schedule Form A13: 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 A13, 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

C1.1.2 FORM OF ACCEPTANCE

To (Name of successful tenderer)

Dear Sir,

CONTRACT SANRAL **N.003-030-2017/8** C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

ACCEPTANCE OF OFFER

- 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 and

Part C4: Site Information

Part Q5: Annexures

Fogether 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 variations included in your offer as well as any changes to the terms of the offer agreed by us during the process of offer and acceptance shall not be valid unless contained in the appended schedule of deviations. Addenda issued during the Tender period are deemed not to be deviations to the Tender documents and schedules.
- 5. The effective date of the Contract shall be the date of this form of acceptance unless the Tenderer (now Service Provider), within seven (7) calendar days of the effective date, notifies the Employer in writing of any justification why he cannot accept the contents of this agreement.
- 6. A SARS compliance check has been done on each of the JV partners and they 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) calendar 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.)
- 7. The Service Provider's Commencement Date shall be deemed to be 14 days after their receipt of the Engineers instruction to establish their equipment and staff on site.
- 8. The Service Provider may employ skilled and semi-skilled or unskilled labour on the works, according to the nature of the requirements, but in conformity with the provisions of Act 40 of 1984, and in compliance with the stipulated requirements of the Employer for this Contract.

- 9. 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 the Service Provider, this form of acceptance constitutes the binding Contract between us.
- 10. The approved Key Persons for this project are:

KEY POSITION	NAME
Senior Site Laboratory Manager	
Site Laboratory Manager (not for scoring purposes)	
Quality Assurance Manager	

NAME AND SIGNATURE OF EM	PLOYER:
SIGNATURE:	DATE:
NAME (IN CAPITALS):	
CAPACITY:	
WSP Group Africa (Pty) Ltd Building 1, Maxwell Office Park Magwa Crescent West Waterfall City Midrand, 1685	
NAME AND SIGNATURE OF WIT	 NESS:
SIGNATURE:	DATE:
NAME (IN CAPITALS):	
ALITHORITY TO ACT:	

C1.1.3 APPENDIX TO FORM OF ACCEPTANCE

Schedule of deviations

- 1. The deviations listed below constitute agreed variations/amendments to the tender data and schedules negotiated between the tenderer and Employer based on information provided in Form A4: Schedule of Variations or deviations by tenderer.
- 2. In the event that an alternative offer is accepted in terms of 4.12 of the Tender Data, it is a fundamental condition of acceptance that all responsibilities and concomitant liabilities arising from the alternative design pass from the Employer to the Service Provider.

Addenda issued during the tender period are deemed not to be variations to the tender.

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.
- 2. In the reading and interpretation of the provisions of this Sub-contract, the Employer shall be WSP Group Africa (PTY) Ltd and the tenderer is referred to as the Service provider.
- 3. Nothing herein shall be construed as creating any privity of contract between the Subcontractor and SANRAL.

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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.

Client

The roads authority on whose behalf the employer is supervising the works contract.

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.

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 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 Economic Empowerment Act, 2003 (Act No. 53 of 2003).

Engineer

The natural or juristic person, partnership, Incorporated Company, Propriety 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.

Employer

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

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, Subcontractor, or supplier of the Service Provider.

Parties

The Employer and the Service Provider.

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.

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.

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.

Subcontractor

A person or body corporate who enters into a subcontract with the Service Provider to perform part of the Services.

Targeted Enterprise

A Civil Engineering Laboratory who is an EME or QSE or Start up, contracted by the Lead Partner 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 Company's 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.

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.

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 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.
- 2.3 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 made between the Parties pursuant to the Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when *delivered* to such Party at the address *stated* in the Contract *Data*, or one week after having been sent by 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 subcontractors* 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.

3.12 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:

- 1.3.1 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 in accordance with the provisions through the Works Contract SANRAL N.003-030-2017/8: FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3, FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0).

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 The Service Provider shall designate one person to act as leader with authority to bind the Joint Venture. Neither the composition nor the constitution of the joint venture shall be altered without the prior consent in writing of the Employer, which shall not be unreasonably withheld.
- 5.1.4 The Service Provider shall be specifically delegated as the Employer's "Mandatory" in terms of the Occupational Health and Safety Act (Act no. 85 of 1993), and as the Employer's Agent as defined in Construction Regulations 4(2), (5) and (6) of the said Act.
- 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 Subcontractors 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 Subcontractors 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.

5.9 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 Subcontractors, 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:
 - i. 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;

ii.withhold all payments due;

- iii. 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. Should the Employer not object in writing within 10 days of receipt of such notification, the replacement shall be deemed to have been approved by the Employer.
- 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 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.

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

- 8.3.1In 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 employee, agents, subcontractors 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 affect.

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.

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.
- 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 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 subcontract 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 subcontract to nor engage a Subcontractor to perform any part of the Services without the prior written authorization of the Employer. The services to be subcontracted and the identity of the Subcontractor 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 subcontracted, notify the Service Provider of his decision, stating reasons, should he withhold such authorization, failing which the Subcontractor shall be deemed to be approved by the Employer. If the Service Provider enters into a subcontract with a Subcontractor without prior approval, the Employer may forthwith terminate the Contract.
- 11.3 The Employer shall have no contractual relationships with Subcontractors. However, if a Subcontractor is found by the Employer to be incompetent, the Employer may request the Service Provider either to provide a Subcontractor 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 subcontract for performance of all or part of the Services.
- 11.5 The Service Provider shall be responsible for the acts, defaults and negligence of Subcontractors 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 subcontracting of any part of the Contract or of the engagement by the Service Provider of Subcontractors to perform any part of the Services shall not relieve the Service Provider of any of his obligations under the Contract.

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

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.

13.3 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; and
 - 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 for on a time basis and all other reimbursable expenses the Service Provider shall maintain records in support of such charges and expenses for a period of six months after the completion or termination of the Contract. Within this period the Employer may, on not less than 14 days notice, require that a reputable and independent firm of accountants, nominated by him at his expense, audit any claims made by the Service Provider for time charges and expenses by attending during normal working hours at the office where the records are maintained.
- 14.5 All accounts presented for payment shall be according to the Employers prescribed format.
- 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 If applicable, Contract Price Adjustment 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	
1	The Employer of SANRAL <i>N.003-030-2017/8</i> C-SL: SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0) is the consulting engineering firm <i>WSP Group Africa (Pty) Ltd</i> .	
	The domicilium citandi et executandi (permanent physical business address) of the employer of the above Sub-Contract is:	
	Building 1, Maxwell Office Park Magwa Crescent West Waterfall City Midrand, 1685	
	The authorised and designated representative of the Employer is: Name: Marshall Muthen Telephone: +27 11 300 6000 Email: marshal.muthen@wsp.com	
	The Client of SANRAL N.003-030-2017/8 C-SL: SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0) is The South African National Roads Agency SOC Limited (SANRAL)	
	The domicilium citandi et executandi (permanent physical business address) of the client of the above Sub-Contract is:	
	SANRAL Eastern Region, 58 van Eck Place, Mkondeni, 3204	
3.1	The Service Provider and his Subcontractors shall be registered with the Bargaining Council for the Civil Engineering Industry (Government Notice R.490 – Part III contained in Government Gazette No. 37750) and rates for wages and conditions of labour agreed by the Bargaining Council for the Civil Engineering Industry shall apply to the Service Provider and all his Subcontractors except where a specific industry publishes its own wage rates and conditions of labour.	
3.4	The address for receipt of communications is:	
	Name: Marshall Muthen	
	Telephone: +27 11 300 6000	
	Facsimile: +27 11 361 1301	
	E-mail: marshall.muthen@wsp.com	
	Address: Building 1, Maxwell Office Park Magwa Crescent West Waterfall City Midrand, 1685	

3.5	The project is: SANRAL N.003-030-2017/8 C-SL: SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0) The location for the project is in the province of KwaZulu-Natal.	
3.6	The Service Provider may only release public or media statements or publish material related to the Employer subject to the approval of the Employer.	
3.11	The penalty payable (per delay incident) is R 10,000.00 per day or part thereof up to a maximum of 10% of the laboratory contract value should the Contractor be delayed as a result of the late production of the laboratory test results.	
	The penalty payable for not achieving SANAS ISO 17025 Accreditation Status within 12 months of the date the contract commences is up to a maximum of 5.0% of the laboratory's respective monthly certificate value. Similarly, a performance bonus of up to 5.0% of the respective monthly certificate is payable for achieving SANAS ISO 17025 Accreditation Status prior to the date 12 months after the date of commencement of the contract. In the event that the site laboratory's accreditation is withdrawn or suspended, a penalty of up to 5.0% of the respective payment certificate shall be imposed.	
	The penalty payable for the Targeted Partner's representative not achieving Technical Signatory Status within 18 months of the date the contract commences is up to a maximum of 5.0% of the laboratory's respective monthly certificate value. Similarly, a performance bonus of up to 1,5% of the respective monthly certificate is payable for achieving Technical Signatory Status prior to the date 18 months after the date of commencement of the contract. In the event that the technical Signatory Status is withdrawn or suspended, a penalty of up to 5.0% of the respective payment certificate shall be imposed.	
3.14.1	The project programme shall be submitted within 14 days of the commencement of the Contract.	
3.14.1c	The programme shall include details related to correlation testing and laboratory audits from the Quality Assurance manager identified in the key personnel.	
5.1	The Service Provider is required to provide the Service with all reasonable care, diligence and skill in accordance with the requirement of SANAS accreditation to SANS17025 and generally accepted professional techniques and standards.	
5.4	Public Liability (to the value of R 1 000 000), Professional Indemnity (to the value of R 500 000) and SASRIA (General Contractor's all risk) insurances are required.	
	The Service Provider shall indemnify the Employer and the South African National Roads Agency Limited (SANRAL) against all losses and claims which may arise from or in consequence of incorrect or sub-standard execution and completion of the project work, and against all claims, demands, lawsuits, damages, costs, including attorney and client costs, charges and expenses whatsoever in respect thereof or pertained thereto.	
	The Service Provider shall, within fourteen days of the date of appointment, deliver to the Employer a signed Mandatory Form, as envisaged by Section 37(2) of the Occupational Health and Safety Act, which shall be in the format provided by the Employer together with the notification of the appointment.	
5.9	The provision of a Performance Guarantee will not be required under this Contract.	

7.1.3.c	Where the key personnel are no longer available to undertake the necessary duties after the award of the tender, the service provider shall within fourteen (14) working days replace the key personnel listed in Form B1 or B2 with personnel with equivalent competencies and subject to re-evaluation and approval by the Employer.	
8.1	The Service Provider's Commencement Date shall be deemed to be 14 days after their receipt of the Engineers instruction to establish their equipment and staff on site.	
8.4.1.e	The Service Provider is responsible to ensure continued accreditation of its main laboratory. Should the main laboratory's accreditation be withdrawn or suspended during the contract, the laboratory shall immediately notify the employer in writing. The employer may terminate the contract 14 days after the suspension or withdrawal of the main laboratory's accreditation.	
9.1	Copyright of documents prepared for the Project shall be vested with the Employer.	
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.	
14.6	Retention monies shall not be applicable	
14.7	Contract Price Adjustment: 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 will be applicable.	

C1.2.3 CONTRACT DATA: INFORMATION PROVIDED BY THE TENDERER

The Service Provider is	
Address:	
Telephone:	
Facsimile:	
The authorised and designated repre	esentative of the Service Provider is:
Name:	
The postal address for receipt of co	ommunications is:
Telephone:	
Facsimile:	
Address:	
KEY PERSONS	NAME
Senior Site Laboratory Manager	
Quality Assurance Manager	

C1.3 OTHER STANDARD FORMS

C1.3.1 FORM OF GUARANTEE

This proforma 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
то:
CONTRACT
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(R)) (the "guarantees amount") for the due fulfilment by (<i>insert the name of Service Provider</i>) (hereinafte
referred to as "the Service Provider") of its obligations to(hereinafter referre to as "") in terms of the above stated contract between the Service Provider an
2. We hereby renounce the benefits of the exceptions <i>non numeratae pecuniae, non causa debit excussionis</i> and <i>divisionis</i> , the meanings and effect whereof we declare ourselves to be full 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 any amount foun to be due and payable to, or if his estate is sequestrated or if he surrender 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 _____ on condition that after completion of the service as stipulated in the contract, ____ 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)		ed to us at the time when		accounts to the Guarantor
	(b)	project, and	the issue of the Taking-Ove		
	(c)	shall not be interprethe amount guarar	reted as extending the Guara nteed.	ntor's liability to anyth	ning more than payment of
7.		guarantee shall bean Courts.	e governed by South Africa	n Law and subject to	the jurisdiction of South
TH	IUS	DONE AND SIGNE	D AT	ON THIS	DAY
OF	=		20		
Gι	JARA	ANTOR			
N/	AME	(IN CAPITALS)			
AS	S WIT	TNESSES:	1	2	
NA	AMES	S (IN CAPITALS)	1	2	
ΔГ	DRE	SSES:	1	2	

PART C2: PRICING DATA

PART C2: PRICING DATA

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

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C2.2	PRICING SCHEDULE (INCORPORATION SBD3.3)	C2-6

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

standard specifications or the Scope of Works.

Test Ref: The standard test method as specified in South African National

Standards (SANS) 3001 series. This reference has been included for

information purposes only.

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 an item and its extent of which is alluded to in the

Pricing Schedule, the Scope of Work or elsewhere, but of 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 mark-up for which a rate 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, quality assurance in terms of. ISO 17025, profits, incidentals, tax (other than VAT), etc, and for the completed items of work as specified in the standard specifications and Project Data and for all the risks, obligations and responsibilities specified in the General Conditions of Contract, Particular or Special Conditions of Contract, except in so far as the quantities given in the 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.

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

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

- C2.1.5 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 for more detailed information regarding the extent of work entailed under each item.
- C2.1.6 Whilst prices or rates will not be subject to Contract Price Adjustment, they 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 twelve-month year on year CPI index (as published in the monthly bulletin PO141.1 of Statistics South Africa for metropolitan and other urban areas) 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, and
- A sum for compilation and printing of procurement documentation, quotation/tender process and evaluation, and all overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate tendered in the Pricing Schedule, provided that for Prime Cost Sums only, the tendered rate excludes 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 (mark-up) against the Sum for handling fee, profits, etc. shall not be negative.

- C2.1.9. Arithmetical errors, omissions and discrepancies refer to clause 5.9 in the Conditions of Tender.
- C2.1.10 A Tender may be deemed unresponsive 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.

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

C2.2 PRICING SCHEDULE (INCORPORATING SBD3.3)

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.2.01	Class A Laboratory Type:				
	a) Complete Class A Soils laboratory:				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	42		
	b) Complete Class A Concrete laboratory:				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	42		
	c) Complete Class A Asphalt laboratory:				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	42		
3.2.04	Computers, printers and software:				
	a) Establishment (including supply of equipment)	Lump Sum	1		
	b) Operation	Month	42		
3.2.05	Laboratory Administration				
	a) Operation	Month	42		
	b) ITIS Data Capture	Month	42		
	c) SARDS Data Capture	Month	42		
	d) BIM 360/ACC Data Capture	Month	42		
3.3.01	Supply of Site Laboratory Personnel:				
	a) Senior Site Laboratory Manager				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	b) Site Laboratory Manager				

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	c) Trainee Laboratory Manager				
	i) Establishment	Lump Sum	3		
	ii) Operation	Prov Sum	1	R3 175 200	
	iii) Handling costs in respect of item 3.3.0.1 (c)ii	%			
	d) Senior Materials Tester (FIELD 1) (also for densities, cubes etc.)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	e) Senior Materials Tester (FIELD 2) (also for densities, cubes etc.)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	f) Senior Materials Tester (FIELD 3) (also for densities, cubes etc.)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	g) Senior Materials Tester (FIELD 4) (also for densities, cubes etc.)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	h) Senior Materials Tester (LABORATORY 1)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	i) Senior Materials Testers (LABORATORY 2)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	j) Senior Materials Testers (LABORATORY 3)				

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	i) Establishment	Lump Sum	1		
	ii) Operation	Month			
	k) Senior Materials Testers (LABORATORY 4)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	I) Materials Testers (FIELD 1)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	m) Materials Testers (FIELD 2)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	n) Materials Testers (FIELD 3)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	o) Materials Testers (FIELD 4)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	p) Materials Testers (LABORATORY 1)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	q) Materials Testers (LABORATORY 2)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	r) Materials Testers (LABORATORY 3)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	s) Materials Testers (LABORATORY 4)				
	i) Establishment	Lump Sum	1		

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	ii) Operation	Month	42		
	t) Assistant Materials Testers (FIELD 1)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	u) Assistant Materials Testers (FIELD 2)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	v) Assistant Materials Testers (FIELD 3)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	w) Assistant Materials Testers (FIELD 4)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	x) Assistant Materials Testers (LABORATORY 1)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	y) Assistant Materials Testers (LABORATORY 2)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	z) Assistant Materials Testers (LABORATORY 3)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	aa) Assistant Materials Testers (LABORATORY 4)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		<u> </u>
	bb) Assistant Materials Testers (LABORATORY 5)	-			
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	cc) Assistant Materials Testers (LABORATORY 6)				

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	dd) Assistant Materials Testers (LABORATORY 7)				
	i) Establishment	Lump Sum	1		
	ii) Operation	Month	42		
	ee) Laboratory General Assistant (x2)	Month	84		
	ff) Data Capturer (x2)	Month	84		
3.3.02	Extra over item 3.3.01 for overtime payments to laboratory personnel:				
	a) Senior Materials Testers (FIELD)	hr	4000		
	b) Senior Materials Testers (LABORATORY)	hr	4000		
	c) Materials Testers (FIELD)	hr	4000		
	d) Materials Testers (LABORATORY)	hr	4000		
	e) Assistant Material Testers (FIELD)	hr	4000		
	f) Assistant Material Testers (LABORATORY)	hr	7000		
	g) Laboratory General Assistants	hr	2000		
	h) Data Capturers	hr	2000		
3.4.01	Training:				
	a) Engineering Skills	Prov. Sum	1	500 000	250 000
	b) Development	Prov. Sum	1	250 000	150 000
	c) Safety	Prov. Sum	1	250 000	150 000
	d) Training Venue	Prov. Sum	1	100 000	50 000
	e) Remuneration of workers undergoing training	Prov. Sum	1	500 000	100 000
	f) Handling costs in respect of item 3.4.01 (a), (b), (c), (d) and (e)	%	700 000		

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3.5.01	Quality Assurance and Audits of the Site Laboratory				
	a) External inspections/Audits	Prov. Sum	1	150 000	150 000
	b) Handling costs in respect of item 3.4.01(a)	%	150 000		
	c) Internal inspections/audits by SANAS accredited parent laboratory	Number	42		
3.6.01	Provision of transport for retrieving samples and all associated field work				
	a) Travelling to perform sampling and field work	Prov. Sum	1	5 000 000	5 000 000
	b) Mark-up in respect of item 3.6.01(a)	%	5 000 000		
3.6.02	Accommodation for site laboratory managers and laboratory testing personnel:				
	a) Provisional sum for accommodation	Prov. Sum	1	5 500 000	5 500 000
	b) Handling costs in respect of item 3.6.02(a)	%	5 500 000		
3.7.01	Specialised Equipment (not provided for in the various laboratory type)				
	a) Walking Profilometer				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	25		
	b) Digital Thermal Infrared camera				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	25		
	c) Concrete Cover Meter				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	42		
	d) Ignition Oven (For Binder Content)				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	20		

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	e) Gyratory				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	20		
	f) Corelok				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	20		
	g) Dynamic Shear Rheometer				
	i) Establishment (including supply of equipment)	Lump Sum	1		
	ii) Operation	Month	20		
3.7.02	Off-site testing (specialist tests)				
	a) Off-site materials testing by an external SANAS accredited laboratory	Prov. Sum	1	1 500 000	1 500 000
	b) Handling costs in respect of item 3.7.02(a)	%	1 500 000		
3.8.01	Compliance with the Occupational Health and Safety Act (Act 85 of 1993) and Regulations, including the Construction Regulations (2014)	Month	42		
3.9.01	Accreditation of Site Laboratory facility by SANAS				
	a) Bonus for early achievement of SANAS ISO17025 accreditation of the site laboratory facility	% per Month	5,0		Rate Only
	b) Penalty for late achievement of SANAS ISO 17025 accreditation of the site laboratory facility	% per Month	5,0		Rate Only
	c) Penalty for SANAS ISO17025 accreditation being suspended or withdrawn from the site laboratory facility	% per Month	5,0		Rate Only
3.9.02	Technical Signatory				

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT			
	a) Bonus for early achievement of inclusion of the Targeted partner's manager as technical signatory on the Schedule of Accreditation	% per Month	1,5	1,5	Rate Only			
	b) Penalty for late achievement of inclusion of the Targeted partner's manager as technical signatory on the Schedule of Accreditation	% per Month	5,0	5,0	Rate Only			
	c) Penalty for suspension or withdrawal of the Targeted partner's manager as technical signatory form the Schedule of Accreditation	% per Month	5,0	5,0	Rate Only			
				OUDTOTAL				
	SUBTOTAL VALUE ADDED TAX (15%)							
TENI	DED CLIM (INCLUDING 450/ VAT) CARRIER		• • •				
IENI	DER SUM (INCLUDING 15% VAT	CARRIEL	TO FURIN UF	OFFER (C1.1.1)				

PART C3: SCOPE OF WORKS

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)

PART C3: SCOPE OF WORKS

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C3.1 SCOPE

This section covers the requirements for the provision and quality management of a site laboratory established to carry out the necessary materials testing and construction quality control of the Works.

C3.2 SITE LABORATORY

Provision for the erection of a site laboratory building, together with workbenches, services, furniture etc. will be made under the Works Contract (i.e. not to be priced by the laboratory Service Provider

The class and type of laboratory envisaged for this project is as follows:

Soils Laboratory: Class A
Concrete Laboratory: Class A
Asphalt Laboratory: Class A
Seals Laboratory: Not Required

When submitting interim certificates for payment the Service Provider shall use the Clients standard forms and formats.

The service provider shall submit payment certificates for all work rendered in the Client'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 complete monthly reports regarding training, empowerment, capacity building, small contractor development, labour and staff returns and any such aspects on the Client's Project Information Module. Failure to comply may result in payments being withheld.

The Client has developed a comprehensive information management 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 Client and 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 Client, and relies on the Service Provider following procedures to populate the system with data. ITIS currently consist of the following platforms applicable to this project:

- 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 ITIS database.

The Client then has several ITIS modules running on any of the above ITIS platforms which affect the Service Provider, who will need to use some of these modules to provide required information. The current modules applicable to this project is the SARDS Laboratory Module and the ITIS Project Information Modules.

Allowance has been made for these requirements in the Pricing Schedule under Additional Duties. Failure to comply may result in payments being withheld.

C3.2.1 CLASS A LABORATORIES

C3.2.1.1 Class A Soils Laboratory

The soils laboratory equipment and consumables envisaged for this project shall be sufficient to conduct the test methods given in Table C3.2.1.1.1 in the site laboratory:

TABLE C3.2.1.1.1 CLASS A SOIL LABORATORY METHODS

DESCRIPTION	TEST METHOD
Sampling of Road Pavement Layers	TMH5 MA2 or MC1
Sampling from Stockpiles	TMH5 MB1
Sampling of Treated Pavement Layers	TMH5 MB10
Division of a Sample Using the Riffler	TMH5 MD1
Division of a Sample by Quartering	TMH5 MD2
Wet preparation and air-drying of samples for plasticity index and hydrometer tests	SANS 3001-GR5
Apparent density of crushed stone base	SANS 3001-AG22
Determination of in situ density using a nuclear density gauge	SANS 3001-NG5
Wet preparation and particle size analysis	SANS 3001-GR1
Determination of the one-point liquid limit, plastic limit, plasticity index and linear shrinkage	SANS 3001-GR10
Determination of the liquid limit with the two-point method	SANS 3001-GR11
Determination of the moisture content by oven-drying	SANS 3001-GR20
Determination of the maximum dry density and optimum moisture content	SANS 3001-GR30
Determination of the maximum dry density and optimum moisture content of laboratory mixed cementitiously stabilized materials	SANS 3001-GR31
Determination of the California bearing ratio	SANS 3001-GR40
Preparation, compaction and curing of specimens of laboratory mixed cementitiously stabilized materials	SANS 3001-GR50
Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum moisture content	SANS 3001-GR51
Determination of the unconfined compressive strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR53
Determination of the indirect tensile strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR54
Determination of the initial stabilizer consumption of soils and gravels	SANS 3001-GR57

The laboratory shall supply sufficient major equipment, consumables and other apparatus required to conduct the tests listed in Table C3.2.1.1.1.

The plastic limit, plasticity index and linear shrinkage shall be determined using SANS3001-GR10 and the Liquid Limit shall be determined by the two-point method described in SANS3001-GR11.

Table C3.2.1.1.2 indicate the anticipated number of each test that is envisaged to be required to be conducted simultaneously. Where the simultaneous execution of the test method does not significantly impact on the numbers of equipment, apparatus or consumables required, the test method is not reflected in Table C3.2.1.1.2 as it is already covered in Table C3.2.1.1.1.

TABLE C3.2.1.1.2 CLASS A SOIL LABORATORY ENVISAGED QUANTUM REQUIREMENTS

DESCRIPTION	TEST METHOD	NUMBER OF SIMULTANEOUS TESTS
Sampling of Road Pavement Layers	TMH5 MA2 or MC1	2
Sampling from Stockpiles	TMH5 MB1	2
Sampling of Treated Pavement Layers	TMH5 MB10	2
Division of a Sample Using the Riffler	TMH5 MD1	2
Division of a Sample by Quartering	TMH5 MD2	2
Wet preparation and air-drying of samples for	SANS 3001-	
plasticity index and hydrometer tests	GR5 SANS 3001-	24
Apparent density of crushed stone base	AG22	4
Determination of in situ density using a nuclear density gauge	SANS 3001- NG5	2
Wet preparation and particle size analysis	SANS 3001- GR1	2
Determination of the one-point liquid limit, plastic	SANS 3001-	2
limit, plasticity index and linear shrinkage	GR10	2
Determination of the liquid limit with the two-point method	SANS 3001- GR11	2
Determination of the moisture content by oven- drying	SANS 3001- GR20	30
Determination of the maximum dry density and optimum moisture content	SANS 3001- GR30	2
Determination of the maximum dry density and	SANS 3001-	0
optimum moisture content of laboratory mixed cementitiously stabilized materials	GR31	2
Determination of the California bearing ratio (Compaction stage only)		2
Determination of the California bearing ratio (Soaking stage only)	SANS 3001- GR40	30
Determination of the California bearing ratio (Penetration stage only)		1
Preparation, compaction and curing of specimens of laboratory mixed cementitiously stabilized materials	SANS 3001- GR50	2
Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum moisture content (Compaction stage only	SANS 3001-	2
Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum moisture content (Rapid curing stage only)	GR51	20
Determination of the unconfined compressive strength of compacted and cured specimens of cementitiously stabilized materials (Crushing stage only)	SANS 3001- GR53	1
Determination of the indirect tensile strength of compacted and cured specimens of cementitiously stabilized materials (Crushing stage only)	SANS 3001- GR54	1
Determination of the initial stabilizer consumption of soils and gravels	SANS 3001- GR57	1

The number of simultaneous tests required is based on the time period in the anticipated construction programme when the highest peak production related to the test method is envisaged.

The Major and Specialised Equipment envisaged is listed in Table C3.2.1.1.3. The cost of provision of equipment required to perform tests listed in Table C3.2.1.1.1 shall be priced as part of the provision of the specific laboratory type and class. Specialised equipment listed in Table C3.2.1.1.3 that is not required to execute test listed in Table C3.2.1.1.1 shall be provided for separately in the Schedule of Quantities under Specialised Equipment.

TABLE C3.2.1.1.3 CLASS A SOIL LABORATORY MAJOR AND SPECIALISED EQUIPMENT

DESCRIPTION	NUMBER
Mechanical Compactor as per SANS3001-GR30	2
CBR / UCS / ITS press as per SANS 3001-GR40, GR53 & GR54	1
Nuclear Density Gauge as per SANS 3001 NG5	2
Concrete drill with suitable generator for Nuclear Density testing on G1 base (20 mm Drill bit)	2
Walking Profilometer as per ASTM E 950	0

C3.2.1.2 Class A Concrete Laboratory

The concrete laboratory equipment and consumables envisaged for this project shall be sufficient to conduct the test methods given in Table C3.2.1.2.1 in the site laboratory:

TABLE C3.2.1.2.1 CLASS A CONCRETE LABORATORY METHODS

DESCRIPTION	TEST METHOD
Sampling of Freshly Mixed Concrete	TMH5 MB9
Particle size analysis of aggregates by sieving	SANS 3001-AG1
Determination of the bulk density, apparent density and water	
absorption of aggregate particles retained on the 5 mm sieve	SANS 3001-AG20
for road construction materials	
Determination of the bulk density, apparent density and water	
absorption of aggregate particles passing the 5 mm sieve for	SANS 3001-AG21
road construction materials	
Making and curing of test specimens	SANS 5861-3
Consistence of freshly mixed concrete - Slump test	SANS 5862-1
Compressive strength of hardened concrete	SANS 5863

The laboratory shall supply sufficient major equipment, consumables and other apparatus required to conduct the tests listed in Table C3.2.1.2.1.

Table C3.2.1.2.2 indicate the anticipated number of each test that is envisaged to be required to be conducted simultaneously. Where the .simultaneous execution of the test method does not significantly impact on the numbers of equipment, apparatus or consumables required, the test method is not reflected in Table C3.2.1.2.2 as it is already covered in Table C3.2.1.2.1.

TABLE C3.2.1.2.2 CLASS A CONCRETE LABORATORY ENVISAGED QUANTUM REQUIREMENTS

DESCRIPTION	TEST METHOD	NUMBER OF SIMULTANEOUS TESTS
Sampling of Freshly Mixed Concrete	TMH5 MB9	1
Particle size analysis of aggregates by sieving	SANS 3001- AG1	2
Determination of the bulk density, apparent density and water absorption of aggregate particles retained on the 5 mm sieve for road construction materials	SANS 3001- AG20	1
Determination of the bulk density, apparent density and water absorption of aggregate	SANS 3001- AG21	1

DESCRIPTION	TEST METHOD	NUMBER OF SIMULTANEOUS TESTS
particles passing the 5 mm sieve for road construction materials		
Making and curing of test specimens	SANS 5861-3	84
Consistence of freshly mixed concrete - Slump test	SANS 5862-1	4
Compressive strength of hardened concrete	SANS 5863	1

Note that only steel cube moulds will be permitted for compressive strength testing, both in the site laboratory and for tests carried out for the Contract in the main laboratory or for correlation testing.

The number of simultaneous tests required is based on the time period in the anticipated construction programme when the highest peak production related to the test method is envisaged.

The Major and Specialised Equipment envisaged is listed in Table C3.2.1.2.3. The cost of provision of equipment required to perform tests listed in Table C3.2.1.2.1 shall be priced as part of the provision of the specific laboratory type and class. Specialised equipment listed in Table C3.2.1.2.3 that is not required to execute test listed in Table C3.2.1.2.1 shall be provided for separately in the Schedule of Quantities under Specialised Equipment.

TABLE C3.2.1.2.3 CLASS A CONCRETE LABORATORY MAJOR AND SPECIALISED EQUIPMENT

DESCRIPTION	NUMBER
Concrete Cube press as per SANS 5863	1
Concrete Cover Meter as per BS1881, Part 204	1

C3.2.1.3 Class A Asphalt Laboratory

The asphalt laboratory equipment and consumables envisaged for this project shall be sufficient to conduct the test methods given in Table C3.2.1.3.1 in the Site Laboratory:

TABLE C3.2.1.3.1 CLASS A ASPHALT LABORATORY METHODS

DESCRIPTION	TEST METHOD
Sampling from Stockpiles	TMH5 MB1
Sampling of Bituminous Binders	TMH5 MB4
Sampling of Previously Blended (ready mixed) Asphalt	TMH5 MB7
Sampling of Asphalt or Concrete from completed layer or structure (Coring)	TMH5 MC2
Sampling and Sample Preparation of Modified Binders	TG1 MB1 AND MB2
Division of a Sample Using the Riffler	TMH5 MD1
Making of asphalt briquettes for Marshall tests and other specialized tests	SANS 3001-AS1
Particle size analysis of aggregates by sieving	SANS 3001-AG1
Determination of the flakiness index of coarse aggregate	SANS 3001-AG4
Sand equivalent value of fine aggregates	SANS 3001-AG5
Determination of the bulk density, apparent density and water absorption of aggregate particles retained on the 5 mm sieve for road construction materials	SANS 3001-AG20
Determination of the bulk density, apparent density and water absorption of aggregate particles passing the 5 mm sieve for road construction materials	SANS 3001-AG21
Determination of Marshall stability, flow and quotient	SANS 3001-AS2
Determination of bulk density and void content of compacted asphalt	SANS 3001-AS10

Determination of the maximum void-less density of asphalt mixes and the quantity of binder absorbed by the aggregate	SANS 3001-AS11
Determination of the soluble binder content and particle size analysis of an asphalt mix	SANS 3001-AS20
Determination of the in situ permeability of a bituminous surfacing (Marvil test)	SANS 3001-BT12
Standard Test Method for Penetration of Bituminous Materials	EN1426
Standard Test Method for Softening Point of Bitumen (Ring- and-Ball Apparatus	ASTM D36
Determination of in situ density using a nuclear density gauge	SANS 3001-NG5

The laboratory shall supply sufficient major equipment, consumables and other apparatus required to conduct the tests listed in Table C3.2.1.3.1.

Table C3.2.1.3.2 indicate the anticipated number of each test that is envisaged to be required to be conducted simultaneously. Where the simultaneous execution of the test method does not significantly impact on the numbers of equipment, apparatus or consumables required, the test method is not reflected in Table C3.2.1.3.2 as it is already covered in Table C3.2.1.3.1.

TABLE C3.2.1.3.2 CLASS A ASPHALT LABORATORY ENVISAGED QUANTUM REQUIREMENTS

DESCRIPTION	TEST METHOD	NUMBER OF SIMULTANEOUS TESTS
Sampling from Stockpiles	TMH5 MB1	2
Sampling of Bituminous Binders	TMH5 MB4	1
Sampling of Previously Blended (ready mixed) Asphalt	TMH5 MB7	18
Sampling of Asphalt or Concrete from completed layer or structure (Coring)	TMH5 MC2	2
Sampling and Sample Preparation of Modified Binders	TG1 MB1 AND MB2	1
Division of a Sample Using the Riffler	TMH5 MD1	2
Making of asphalt briquettes for Marshall tests and other specialized tests	SANS 3001-AS1	2
Particle size analysis of aggregates by sieving	SANS 3001-AG1	3
Determination of the flakiness index of coarse aggregate	SANS 3001-AG4	1
Sand equivalent value of fine aggregates	SANS 3001-AG5	1
Determination of the bulk density, apparent density and water absorption of aggregate particles retained on the 5 mm sieve for road construction materials	SANS 3001-AG20	1
Determination of the bulk density, apparent density and water absorption of aggregate particles passing the 5 mm sieve for road construction materials	SANS 3001-AG21	1
Determination of Marshall stability, flow and quotient	SANS 3001-AS2	1
Determination of bulk density and void content of compacted asphalt	SANS 3001-AS10	1
Determination of the maximum void-less density of asphalt mixes and the quantity of binder absorbed by the aggregate	SANS 3001-AS11	4
Determination of the soluble binder content and particle size analysis of an asphalt mix	SANS 3001-AS20	2
Determination of the in situ permeability of a bituminous surfacing (Marvil test)	SANS 3001-BT12	1

Standard Test Method for Penetration of Bituminous Materials	EN1426	1
Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus	ASTM D36	2
Determination of in situ density using a nuclear density gauge	SANS 3001-NG5	2

The number of simultaneous tests required is based on the time period in the anticipated construction programme when the highest peak production related to the test method is envisaged

The Major and Specialised Equipment envisaged is listed in Table C3.2.1.3.3. The cost of provision of equipment required to perform tests listed in Table C3.2.1.3.1 shall be priced as part of the provision of the specific laboratory type and class. Specialised equipment listed in Table C3.2.1.3.3 that is not required to execute test listed in Table C3.2.1.3.1 shall be provided for separately in the Schedule of Quantities under Specialised Equipment.

TABLE C3.2.1.3.3 CLASS A ASPHALT LABORATORY MAJOR AND SPECIALISED EQUIPMENT

DESCRIPTION	NUMBER
Mechanical Compactor as per SANS3001-AS1	2
Press as per SANS 3001-AS2	1
Gyratory Compactor as per SANS3001-AS3	0
Coring Machine with applicable barrels as per TMH5 MC2	1
Centrifuge as per SANS 3001 AS20	1
Digital Thermal Infrared camera	0

C3.2.4 MEASUREMENT AND PAYMENT

Time related payment items (per month or pro rata for parts of a month) shall only be applicable once the equipment has been established on site, including accreditation and required calibration of laboratory equipment, and shall be no earlier than 14 days prior to the Contractor's programmed commencement date for the relevant construction operations and shall cease on completion of the specific operations.

The rate tendered for the establishment and operation of each laboratory type shall include the costs associated with operating the site laboratory under the accredited parent laboratory's full Quality Assurance Management system as approved under the parent laboratory's SANAS accreditation.

The costs for producing a monthly laboratory report in the latest format prescribed by SANRAL, shall be included in the rate tendered. Included in this report shall be monthly Equivalent Indicator Unit (EIU) returns, which shall form the basis of the regular staffing level review.

The rate tendered under this specific item/s shall also include for all costs as follows:

- All costs associated with providing all the equipment including loading, transporting and setting up the equipment on site to conduct the tests required,
- All costs associated with loading, transporting and setting up the equipment on site
- Testing and calibration of equipment as specified in the relevant test methods and in accordance with the SANAS certification requirements
- The loading rates of the machines for all tests shall be verified
- Intermediate calibration as specified in the relevant test methods and SANAS certification requirements
- Calibration of all Presses shall be done on site by calibration service providers that are SANAS accredited for force calibration
- Maintaining a neat and orderly working and training environment within the laboratory facility
- Removal of equipment from site on completion of the Works

In the event of the completion of Works occurring sooner than the estimated contractual period, sixty (60) days' notice shall be provided in writing to the laboratory for purposes of removal of equipment from site.

Item Unit

3.2.04 Computers, printers and software

a) Establishment (including supply of equipment)Lump Sum

b) OperationMonth

The rate tendered for subitem 3.2.04(b) for computers, printers and software shall be the rate per calendar month (pro rata for part of a month) and shall include full compensation for supplying and maintaining all necessary computer hardware, software, printers and modems (inclusive of data charges) and associated consumables required for the generation and reporting of test results.

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

The unit of measurement for subitem 3.2.05(a) shall be the rate per calendar month (pro rata for part of a month). The rate tendered for the operation of laboratory administration and consumables shall include full compensation for supplying and maintaining all office equipment and incidentals required for carrying out quality assurance testing and reporting including:

- Routine quality assurance including correlation testing at least on a monthly basis for high frequency testing, with the number of any particular tests being sufficient in number in order to permit statistical evaluation of test results. The provision for correlation testing shall include for all costs including:
 - Assessment of personnel
 - Transport of samples
 - Accommodation and subsistence
 - Correlation testing in accordance with 3.2.1.
 - Weekly replicate testing
- Compilation of monthly laboratory reports
- Cell phones, including rental and call charges
- All safety equipment for laboratory personnel in accordance with the OH&S requirements (e.g. safety jackets, orange lights, boots, etc). All laboratory office consumables, stationary etc.
- Digital camera
- Any other items necessary for the capture of all relevant data required for reporting to the Engineer and the information required to compile "As-Built" Materials Records.

The rate tendered for subitem 3.2.05(b) shall include full compensation for provision of suitable computed hardware and internet connection, the capturing of the following on a monthly basis:

- Project Expenditure: All vendor/supplier payments on the project must be captured, which include payments made to the consultant, contractor, sub-contractor and suppliers. The expenditure payments must be divided into Design, Construction and Supervision with the laboratory being responsible only capturing for payments made to the laboratory as part of the supervision.
- Vendors: The vendor/supplier must first be loaded onto the system before the
 expenditure data can be captured. The following data will be required: vendor name,
 entity type, registration number, VAT number, BBBEE, copies of BBBEE
 certificate/affidavit must be uploaded, CSD number, ownership details and the
 company contact details. A vendor must only be added once.
- Employment Data: The employment data of all employers, working on the project must be captured. The following data must be captured: employer/beneficiary, job type, days worked, hours worked, gross wage/salary paid for the hours worked and proof of payment and attendance registers for unskilled and semi-skilled employers must be uploaded.
- Training Data: All accredited training provided to employers, working on the project, must be captured. The following data must be captured: employer/beneficiary, course type, training vendor, training days and training value.
- Beneficiaries: The beneficiary must first be loaded onto the system before the
 employment and training data can be captured. The following data will be required:
 First name(s), surname, initials, RSA ID number and copy of ID must be uploaded or
 passport number, visa details and copy of passport and work visa must be uploaded,
 date of birth, gender, race, disabilities, qualifications and certificates, address and
 contract details, home languages, number of dependents and schoolchildren and
 grant information.

It shall further include for all personnel and other costs, disbursements, overheads and profit. The full description of the requirements of the computer hardware, software, internet connectivity and responsibilities of the services provider in capturing the ITIS data is available from the ITIS website using the hyperlink https://itis.nra.co.za/Portal/MyAccount/UserManuals which may be accessed once the used has registered on the ITIS portal as per Appendix C of this contract.

The rate tendered for subitem 3.2.05(b) shall include full compensation for provision of suitable computed hardware and internet connection, the utilisation on a continued basis for the capturing and destitution of information as the test results are generated in the laboratory:

- Capturing of all the required in formation on the equipment used during testing
- Utilisation of the SARDS software to register and track sample through the laboratory.
- Utilisation of the SARDS software to calculate the test results and generation of the test results
- Utilisation of the SARDS software to generate and workflow the Acceptance Reports for submission to the employer.

It shall further include for all personnel and other costs, disbursements, overheads and profit. The full description of the requirements of the computer hardware, software, internet connectivity and responsibilities of the services provider in capturing the ITIS data is available from the ITIS website using the hyperlink https://itis.nra.co.za/Portal/MyAccount/UserManuals which may be accessed once the used has registered on the ITIS portal as per Appendix C of this contract.

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

All pay items for which the unit of measurement is "month" are deemed to be based on 23 working days per month and shall become applicable only for use in calculations of approved extensions of time in terms of the Conditions of Contract:"

The rate tendered for subitem 3.2.05(d) shall include full compensation for provision of suitable computed hardware (e.g., laptop, tablet) and internet connection, the utilisation on a continued basis for the capturing and destitution of information as the test results are generated in the laboratory:

C3.3 LABORATORY PERSONNEL

The Service Provider shall provide sufficient competent and experienced laboratory staff in order to carry out the required quality control testing of the Works Contract. Provision has been made in the Pricing Schedule for various levels of managerial and materials testing staff that may be required. The level and actual number of testers shall be appropriate to the scope of the works and the Works Contractor's production rates.

An <u>experienced</u> Senior Site Laboratory Manager from the Lead Partner and Site Laboratory Manager from the Targeted Partner will be required for the full duration of the contract from approximately 01 September 2023 as well as experienced Senior Materials Testers (Field), Senior Materials Testers (Laboratory), Material Testers and Assistant Material Testers.

Three (3) Trainee Laboratory Managers will be required for each of the specified site laboratories and may be identified and sourced by the lead or targeted partner's laboratory or by SANRAL for the full duration of the contract from approximately 01 September 2023.

The laboratory managers and staff shall comply with the following minimum requirements for each category respectively:

TABLE C3.3 MANAGERS AND STAFF

ITEM NUMBER	DESCRIPTION	ENTRY QUALIFICATION REQUIREMENTS	COMPETENCE REQUIREMENTS
3.3.01 a)	Senior Site Laboratory Manager	Relevant National Diploma and 10 years relevant experience or relevant NQF 6 and 10 years relevant experience. Drivers Licence OR Grade 12 and 15 years relevant experience. or relevant NQF 4 and 15 years relevant experience. Drivers Licence	Laboratory Management production planning, liaison with clients, signing reports, implementation of quality control system, etc. Also in-charge of multi- disciplinary site laboratory (Soils, Concrete, Asphalt, Seals and Aggregates).
3.3.01 b)	Site Laboratory Manager	Relevant National Diploma and 3 years relevant experience. or relevant NQF 6 and 3 years relevant experience. Drivers Licence OR Grade 12 and 8 years relevant experience. or relevant NQF 4 and 8 years relevant experience. Drivers Licence OR Grade 10 or equivalent and 15 years relevant experience Drivers Licence	Competent and qualified to do all tests in all divisions and do quality laboratory control and implementation. Do all calculations in full. Control laboratory activities on smaller projects. Competent and qualified to supervise and execute field work. Be familiar with COLTO. Knowledge of Health and Safety Procedures
3.3.01 c)	Trainee Laboratory Manager	Grade 12 and 7 years relevant experience or relevant NQF 4 and 7 years relevant experience, or an additional 2 years	The person shall be at least at the level of a Senior Materials Tester with the predisposition to

		relevant experience for each year of schooling below Grade 12.	become a Laboratory Manager. One to be provided by the laboratory service provider and the other two to be appointed from the local community
3.3.01 d) - 3.3.01 g)	Senior Materials Tester (FIELD)	Grade 12 and 3 years relevant experience or relevant NQF 4 and 3 years relevant experience. 2 additional years relevant experience for each year of schooling below grade 12. Drivers Licence	Fieldwork (densities, layer/stockpile sampling, manufacture and handle concrete cubes, DCP, Ring and Ball test (road surfaces), Sand Patch, On site Viscosity tests ,Sampling of Asphalt and Bitumen.
3.3.01 h) -, 3.3.01 k)	Senior Materials Tester (LABORATORY)	Grade 12 and 5 years relevant experience or relevant NQF 4 and 5 years relevant experience, or an additional 2 years relevant experience for each year of schooling below Grade 12.	Competent and qualified to do all tests in the laboratory division (i.e.: soils, concrete asphalt, or seals,) and do all calculations in full. Control laboratory activities i.e.: quality control under supervision.
3.3.01 l) - , 3.3.01 o)	Material Tester (FIELD)	Grade 10 and 2 years relevant experience, or relevant NQF 3 and 2 years relevant experience, or an additional 2 years relevant experience for each year of schooling below Grade 10	Competent and qualified to execute all tests in one laboratory division i.e.: soils, concrete asphalt, or seals,) with bench calculations.
3.3.01 p) - 3.3.01 s)	Material Tester (LABORATORY)	Grade 10 and 2 years relevant experience, or relevant NQF 3 and 2 years relevant experience, or an additional 2 years relevant experience for each year of schooling below Grade 10	Competent and qualified to execute all tests in one laboratory division i.e.: soils, concrete asphalt, or seals,) with bench calculations.
3.3.01 t) - 3.3.01 w)	Assistant Materials Tester (FIELD)	Grade 10 and 1 year relevant experience or relevant NQF 3 and 1 year relevant experience, or an additional 2 years relevant experience for each year of schooling below Grade 10	Competent to execute and complete tests or group of tests under direct supervision
3.3.01 x) - 3.3.01 dd)	Assistant Materials Tester (LABORATORY)	Grade 10 and 1 year relevant experience or relevant NQF 3 and 1 year relevant experience, or an additional 2 years relevant experience for each year of schooling below Grade 10	Competent to execute and complete tests or group of tests under direct supervision. Two to be provided by the laboratory service provider and five to be appointed from the local community.

3.3.01 ee)	Laboratory General Assistant	Grade 10	To be employed from the local community through the Works Contract Employment structure
3.3.01 ff)	Data Capturer	Grade 10	Computer literate competent to use MS Word and Excel for reporting of results. To be employed from the local community through the Works Contract Employment structure

Addition in testing staff, from the tendered quantities, may be required by the time related specific requirements on the project. Additional testing staff shall be provided by the laboratory after having received written notice to increase the staff beyond the tendered quantities by the engineer. Compensation for additional staff shall be in accordance with the average of the rates tendered for the level of staff required. The laboratory shall be given 30 days' notice in writing.

Reduction in testing staff, from the tendered quantities, may be required by the time related specific requirements on the project. Reduction of testing staff shall be provided by the laboratory after having received written notice to decrease the staff beyond the tendered quantities by the engineer. The laboratory shall be given 30 days' notice in writing.

Notwithstanding the previous paragraph, 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 is otherwise considered by the Employer, on reasonable grounds to be undesirable.

C3.3.1 DUTIES AND RESPONSIBILITIES OF MANAGERIAL STAFF

C3.3.1.1 Duties of The Senior Site Laboratory Manager and The Site Laboratory Manager

Duty to manage the site lab facility and:

- Ensure the OHS requirements in the site laboratory is met
- Ensure that the laboratory's environmental issues are taken care of.
- Ensure a tidy working environment
- Co-ordinate the implementation of the quality system.

Duty to manage personnel and:

- Monitor the performance of the testing staff and co-ordinate HR development
- Practical training and supervision of testers in accordance with laid down procedures
- Maintain personnel and training files.

Duty to manage equipment and:

- Manage the maintenance servicing and cleaning of equipment
- Manage equipment and delegate operation of the equipment to testers.
- Ensure that the site lab has sufficient road worthy and safe vehicles for use
- Calculate correction factors, display them and update them as and when required

Duty to manage testing and:

- Act as leader of the site laboratory and provide direction to the activities of the laboratory
- Liaise with the testing staff and Quality Manager for day to day running of the laboratory
- Ensure that test methods are strictly followed
- Ensure that all system problems are discussed with the QA manager and that the necessary steps are taken to adopt or implement further procedures to prevent recurrences

- Monitor requests for testing and schedule sampling and testing activities
- Ensure that the testing is conducted in good time
- Stop testing activities (in consultation with the QA manager) and immediately inform the RE/SMT.
- Ensure sample storage is managed and records are kept

Duty to Manage Data and Records and

- Ensure that test data is captured, processed, backed-up and retrievable
- Issue work sheets to testers and coordinate correctness of samples to be tested.

Duty to issue test results within required time frames and

- Co-ordinate reporting of test results and conduct final checking of test results by ensuring data transfer is correct
- Accept, sign and issue test result or reject test result and retest samples.
- Recall test reports erroneously issued to RE/SMT

C3.3.1.2 Duties of The Quality Assurance Manager

Duty to implement the main laboratory's QA system on site and:

- Ensure that the quality system is implemented and followed at all times
- Approve and issue worksheets, report sheets, verification sheets and test methods
- Manages the administration and maintenance of all quality selected documents.
- Documents and makes available new quality management processes and procedures or changes to them as appropriate.
- Immediately remove all invalid and obsolete documents
- Ensure tester proof of competence is available on site
- Ensure personnel and training files are kept up to date.
- Ensure the latest updated test methods are available to the testers
- Ensure all computer software is validated and proof of validation is available on site
- Ensure a correlation testing schedule is approved by the engineer
- Ensure correlation testing is conducted in accordance with the approved schedule
- Ensure that correlation test results are suitably recorded, reviewed and evaluated and the correlation results are available on site in good time
- Ensure regular and continued participation by the site laboratory in an accredited proficiency testing scheme
- Ensuring that equipment meets accuracy and specification requirements.
- Preparing calibration/verification schedules and maintaining schedules
- Organize calibration of test and measurement equipment and check content of calibration certificates
- Ensure the test results could not be compromised by the site laboratory facility and testing environment
- Ensure all critical supplies are procured from an approve suppliers list
- Stop testing activities (in consultation with the lab manager) and immediately inform the RE/SMT
- Instruct resumption of testing.
- Ensure that test methods are strictly followed
- Approve the format of standard reports to be issued on site.

Duty to conduct audits in the site laboratory and:

- Ensure an internal main lab audit schedule is approved by the engineer
- Ensure internal main lab audits are conducted in accordance with the approved schedule
- Ensure that internal main lab audit reports are on site in good time
- Ensure that they attend SANRAL or other external site laboratory inspections or audits

Duty to raise and close out non-conformance in the site laboratory and:

- Ensure that non-conformance reports are raised in accordance with the main laboratory's QA system
- Carry out root cause analysis on all non-conformances
- Implement corrective action and preventive action timeously.
- Close out all non-conformances

The minimum requirement for the Quality Assurance Manager is 8 years' experience in Civil Engineering Materials Testing Laboratories and at least score 10 points on Form B2.

C3.3.2 NORMAL TIME AND OVERTIME

The Service Provider shall so program it's work so that all testing is done during normal working time which, for the purpose of this Contract shall be taken between 07h00 and 17h00 from Mondays to Fridays as well as Saturdays as required by the Contractor's programme. The normal working hours shall be taken as 45 hours per week and a month shall be taken as 23 working days.

C3.3.3 MEASUREMENT AND PAYMENT

All the work shall be measured in the Item no's, units and rates as described in the relevant Schedule of Quantities. Only the actual quantities of work done as requested by the Employer or his authorised representative will be measured for payment and the rates shall apply irrespective of the margin in which the actual quantities differ from those scheduled.

Unit

3.3.01 (a), (b) and (d) to (dd) Supply of Site Laboratory Personnel (specify type):

i) EstablishmentLump Sum

ii) OperationMonth

Payment for laboratory personnel shall only be applicable to those personnel necessary and approved by the Employer prior to establishment on site. Time related payment items (per month or pro rata for parts of a month) shall only be applicable once the personnel has been established on site and shall be no earlier than 14 days prior to the Contractor's programmed commencement date for the relevant construction operations and shall cease on completion of the specific operations.

The rates tendered under sub item (i) shall include full compensation for all costs related to establishing the individual personnel as listed in the Pricing Schedule on site and their removal after completion of the Works, and shall include all travelling costs, furniture removal costs if required, etc. No additional payment will be made for the de-establishment of personnel. Any replacement of staff members during the project for whatever reason shall not be eligible for additional payment of establishment.

The rate tendered under sub item (ii) for each specific type of personnel shall include for all costs for the total number of personnel specified for that sub-item in the bill of quantities as follows:

- Salary
- Any additional allowances
- Bonuses
- Leave and sick leave taken during and outside of the standard industry shutdown period
- All company contributions such as provident fund, group life benefits, medical aid etc.
- Taxes and levies
- Handling costs and profit

Item

Unit

3.3.01 c) Trainee Laboratory Manager:

i) EstablishmentLump Sum

ii) OperationProv Sum

(iii) Handling costs in respect of Item 3.3.01 (c) (ii)%

Payment for laboratory personnel shall only be applicable to those personnel necessary and approved by the Employer prior to establishment on site. Time related payment items (per

month or pro rata for parts of a month) shall only be applicable once the personnel has been established on site and shall be no earlier than 14 days prior to the Contractor's programmed commencement date for the relevant construction operations and shall cease on completion of the specific operations.

The rates tendered under sub item 3.3.01(c)(i) shall include full compensation for all costs related to establishing the individual personnel as listed in the Pricing Schedule on site and their removal after completion of the Works, and shall include all travelling costs, furniture removal costs if required, etc. No additional payment will be made for the de-establishment of personnel. Any replacement of staff members during the project for whatever reason shall not be eligible for additional payment of establishment.

The Provision Sum under sub item 3.3.01(c)(ii) provided will cover the monthly (pro rata for part of a month) Total Annual Cost of Employment (TACE) of the Trainee Laboratory Manager which shall include the following:

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

Description	Site staff overheads
Salaries (Technical) TACE	1.00
Salaries (Non-technical) TACE	0.24
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	1.44

The percentage tendered under sub item 3.3.01(c)(iii) Handling cost shall include full compensation for all additional overhead costs related to the employment the training of trainee laboratory manager.

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.

The TACE shall be verified by means of an audited statement.

Item Unit

3.3.02 Extra over item 3.3.01 for overtime payments to laboratory personnel:

(a) Senior Materials Testers (FIELD)	hour (hr)
(b) Senior Materials Testers (LABORATORY)	hour (hr)
(c) Materials Tester (FIELD)	hour (hr)
(d) Materials Tester (LABORATORY)	hour (hr)
(e) Assistant Material Testers (FIELD)	hour (hr)
(f) Assistant Material testers (LABORATORY)	hour (hr)
(g) Laboratory General Assistant	hour (hr)
(h) Data Capturer	hour (hr)

The unit of measurement under this pay item shall be the hour of overtime worked by the relevant hourly paid personnel. Extra payment to the Service Provider in respect of overtime shall only be done in cases in which the personnel qualify <u>and are paid</u> for overtime worked in accordance with the basic Conditions of Employment Act. In all such cases the Service Provider will be required to prove that his personnel are in fact receiving overtime pay. Joint approval of overtime shall be by the Laboratory Manager and the Engineer. Time sheets for all staff shall be included in the monthly certificate submitted to the Employer for payment.

All pay items for which the unit of measurement is "month" are deemed to be based on 23 working days per month and shall become applicable only for use in calculations of approved extensions of time in terms of the Conditions of Contract:"

C3.4 TRAINING

C3.4.1 TRAINING OF LOCALLY EMPLOYED PERSONNEL AND TARGETED PARTNER STAFF

Appropriate training shall be provided by qualified experienced training practitioners. The training in the Engineering Skills shall include sampling and testing of materials and appropriate level of theory in the use of construction materials. The training related to the development of the trainees shall be suitable for the laboratory industry and the level of the trainees. The trainees shall be trained in both occupational safety in the laboratory as well as on the whole construction site. Safety measure related to road safety and traffic accommodation shall be provided as applicable.

C3.4.2 MEASUREMENT AND PAYMENT Item

Unit

3.4.01 Training:

(a) Engineering Skills	Provisional Sum
(b) Development	Provisional Sum
(c) Safety	Provisional Sum
(d) Training Venue	Provisional Sum
(e) Remuneration of workers undergoing training	Provisional Sum
(f) Handling costs in respect of item 3.4.01(a), (b), (c), (d)	and (e) %

Payment under item 3.4.01 does not include the cost of training which the Laboratory is required to provide as part of his obligations for the pre-qualification and tender processes. The laboratory shall be required satisfy the competence standards of its own personnel.

The Lead Partner's own staff may attend the courses provided. However, such attendants from the Lead Partner's staff and permanent labour complement, shall not be considered for measurement and payment purposes.

Payment under sub-items 3.4.01 (a), (b) and (c) shall be the actual sum paid for the trainees to undergo training in the respective skills as specified.

Payment under sub-item 3.4.01 (d) shall be full compensation for the provision of the training venue, for all necessary lighting, power, furniture, stationery, consumables and study material and for transportation of the trainees to and from the training venue.

Payment under sub-item 3.4.01 (e) shall be the daily wage in normal work hours of the individual workers whilst they are away from their normal duties and at training.

The tendered percentage for sub-item 3.4.1 (f) is a percentage of the amounts actually spent under sub-items 3.4.01 (a) to (e), which shall include full compensation for the overhead charges and profit of the Service Provider.

C3.5 STANDARD OF TESTING

C3.5.1 QUALITY ASSURANCE

The Service Provider shall equip, staff and administer a site laboratory to undertake the relevant acceptance control testing in accordance with specified requirements of the Works Contract as well as the Employer's standard requirements. As the scope of the Works may not be finalized, more than one "laboratory type" or major "equipment type" may be included in the Pricing Schedule. Payment shall however only apply to the specific "laboratory types" and "major equipment type" necessary for the specific work.

The site laboratory 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, TMH5 as well as the SANAS accreditation requirements.

Any deviations from the full Quality Assurance Management system as approved under the parent laboratory's SANAS accreditation shall only be allowed if approved in writing by the employer.

The site laboratory shall conduct correlation testing with at least two SANAS accredited facilities in accordance with the approved inter-laboratory testing schedule and scope submitted to the Employer. Both the offsite facilities used in each round of inter laboratory testing shall be accredited for the specific test method used in the correlation.

C3.5.2 INTERNAL, EXTERNAL AND THIRD PARTY AUDITS

The Client and the Employer reserves the right to inspect the Service Provider's equipment and compliance with the approved methods and specifications at any time, and to reject equipment not complying with the relevant specification. The Client and the Employer reserves the right to request an ad hoc SANAS technical assessment of the laboratory at any time during the Contract. These ad hoc technical assessments shall be paid for under Item 3.5.01(a) if no major non-conformances are found during the assessment. In the event that major non-conformances are found, the SANAS technical assessment shall be paid for solely by the Service Provider.

Audits conducted by any person other than the QA manager recorded as key personnel will not be regarded as sufficient.

C3.5.3 TESTING AND SAMPLING METHODS AND PROCEDURES

All testing of samples shall be carried out in accordance with the latest published standard procedure prescribed by the following, in order of preference or as requested by the Client.

- South African National Standards (SANS) 3001 Civil Engineering Test methods.
- TMH5 / Sabita Manual 37 (Feb 2021): Sampling Methods for roads construction materials, 1981
- Technical Guidelines: The use of Modified Bituminous Binders in Road Construction (TG1-Fourth Edition January 2019)
- Interim Guidelines: The design and use of foamed bitumen treated materials (Asphalt Academy

 TG2- Third Edition August 2020)
- Standard test methods as described in Section 8100 of the Standard Specifications for the Road and Bridge Works for State Road Authorities (1998), issued by COLTO.
- SABITA Manuals
- British Standards Institute Specifications (abbreviation: B.S.) and European Standards (abbreviation: EN)
- American Society for Testing and Materials (abbreviation: ASTM)
- American Association of State Highway and Transportation Officials (abbreviation: AASHTO)
- Other methods as supplied by the Employer or Client

In all cases the latest amendment or revision current when a test is requested should be used when reference is made to one of the above standard methods in the specification. The method and revision shall be reflected on the test results.

C3.5.4 REPORTING OF RESULTS

All reports and results shall also be submitted in a compatible electronic format to the requirement of the engineer. Original signed hardcopies of results shall also be made available.

C3.5.5 MEASUREMENT AND PAYMENT Item

Unit

- 3.5.01 Quality Assurance and Audits of the Site Laboratory:
 - (a) External inspections/Audits Provisional Sum
 - (b) Handling costs in respect of item 3.5.01(a).....%
 - (c) Internal inspections/audits by SANAS accredited parent laboratory . No

Expenditure under sub item 3.5.01(a) shall be for external inspections and audits carried out by a SANAS Technical assessor for civil engineering materials testing, currently or previously contracted by SANAS on the site laboratory, on the instruction of the Engineer. The SANAS Technical assessor shall not be from the main laboratory or of the same laboratory group as the lead or targeted partners. All travel, accommodation and related costs incurred by the technical assessor shall be included in the item.

The % tendered under 3.5.01(b) shall include full compensation for costs associated with the procuring the services of a SANAS contracted technical assessor.

The tenderer shall not be entitled to the handling cost under subitem 3.5.01(b) if the procurement of the service of the SANAS Technical assessor is handled by the employer or the client.

Expenditure under sub item 3.5.01(c) shall be for monthly audits performed by the Person provided for on Form B2 from the SANAS accredited parent laboratory on the site laboratory and shall include for the provision of audit reports to the Engineer. The internal audits shall take account of all the requirements of ISO 17025.

The frequency and intensity of the inspections / audits shall be programmed to cover the scheduled site tests within a six (6) monthly rotation. The Site Laboratory Manager and the Quality Assurance Manager shall not be the same person. The Quality Assurance Manager will be required to attend any External SANAS assessor audits and SANRAL laboratory inspections.

C3.6 PROVISION OF TRANSPORT AND HOUSING

C3.6.1 PROVISION OF TRANSPORT FOR SAMPLING AND FIELDWORK

The Laboratory shall be required to retrieve samples on site and transport the samples to the site laboratory for testing as well as all fieldwork required. The rates tendered herein shall apply to the transport of these samples and fieldwork.

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. Estimated travel costs as a result of week end travel by staff to their place of permanent residence shall be approved beforehand by the Employer.

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 travel in excess of 3000 kilometres per vehicle per calendar month shall be reduced and paid for at 60% of the rate.

The kilometre for all vehicles shall be limited to a Category A and B type vehicle with a 2500 Engine Volume cc. In exceptional cases the Client may consider a different category vehicle and/or engine volume. Fuel rates can be downloaded monthly by following the link: https://www.transport.gov.za/web/department-of-transport/roads.

Vehicle Classes

- A Passenger motor cars and station wagons and 4x2 Double Cabs
- B Two wheel drive light delivery vehicle, panel vans and other similar goods vehicles with a carrying capacity up to one metric ton
- C Four wheel drive light delivery vehicle (single and double cab)
- D Mini busses (up to 15 seater)

C3.6.2 HOUSING OF MANAGERIAL AND TESTING STAFF

Appropriate housing for the laboratory managers and testing staff 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 lab managers and staff shall be located as near to the Works as practically possible.

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

TABLE C3.6.2: MONTHLY ACCOMMODATION ALLOWANCE RATES

ANNUAL BASIC	AREA IN WHICH HOUSING UNIT IS LOCATED		
SALARY	OTHER	METROPOLITAN AREAS	
Up to - R50 000	R 1 950	R 1 950	
R50 000 – R100 000	R 2 577	R 2 969	
R100 000 – R200 000	R 3 266	R 3 902	
R200 000 – R400 000	R 4 003	R5 016	
R400 000 and over	R 4 782	R 5 673	

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 will publish revised amounts on a yearly basis.

C3.6.3 MEASUREMENT AND PAYMENT

ltem Unit

3.6.01 Provision of transport for retrieving samples and all associated field work

(a) Travelling to perform sampling and field work......Prov. Sum

(b) Mark-up in respect of item 3.0.01(a)	(b)	rk-up in respect of item 3.6.01(a)	.%
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The provisional sum 3.6.01(a) is to cover the cost of travelling to perform the duties and any additional duties as may be ordered by the Employer. The rate for transport in excess of 3000km per vehicle per 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 kilometre for all vehicles shall be limited to a Category A and B type vehicle with a 2500 cc Engine Volume in accordance with the table C3.6.2. In exceptional cases the Client may consider a different category vehicle and/or engine volume.

The unit of measurement for pay item 3.6.01(b) shall be the percentage.

The percentage tendered shall include for all administration, handling cost and profit incurred by the Service Provider.

Expenditure under this item shall be for rented or other appropriate accommodation (including all basic services connected with such accommodation) approved by the Engineer. The Service Provider shall be directly responsible for entering into any agreements/leases for such accommodation for all personnel established by the service provider to the contract.

The % tendered in sub item (b) shall include full compensation for costs associated with locating suitable accommodation, rental negotiations and entering into lease agreements.

C3.7 SPECIALISED EQUIPMENT AND OFFSITE TESTING

C3.7.1 PROVISION OF SPECIALISED EQUIPMENT

The Major and Specialised Equipment envisaged is listed in Tables

C3.2.1.1.3 – Class A Soil Laboratory Major and Specialised Equipment,

C3.2.1.2.3 - Class A Concrete Laboratory Major and Specialised Equipment,

C3.2.1.3.3 - Class A Asphalt Laboratory Major and Specialised Equipment,

The cost of provision of equipment required to perform tests listed in Tables:

C3.2.1.1.1 - Class A Soils Laboratory Methods and/or,

C3.2.1.2.1 - Class A Concrete Laboratory Method and/or,

C3.2.1.3.1 - Class A Asphalt Laboratory Methods

shall be priced as part of the provision of the specific laboratory type and class

Specialised equipment listed in Table

C3.2.1.1.3 - Class A Soil Laboratory Major and Specialised Equipment and/or,

C3.2.1.2.3 – Class A Concrete Laboratory Major and Specialised Equipment and/or,

C3.2.1.3.3 - Class A Asphalt Laboratory Major and Specialised Equipment and/or,

that is not required to execute test listed in Tables.

Specialised Equipment

that is not required to execute test listed in Tables

C3.2.1.1.1 - Class A Soils Laboratory Methods and/or,

C3.2.1.2.1 - Class A Concrete Laboratory Method and/or,

C3.2.1.3.1 – Class A Asphalt Laboratory Methods and/or,

is provided for separately in the Schedule of Quantities under Specialised Equipment.

Major Equipment listed in standard SANS3001 test method that are required to be executed in the site laboratory in accordance with C3.2.1, C3.2.2 and C3.2.3 shall not be paid under C3.7.

C3.7.2 CONCRETE COVER TESTING PROCEDURE

1. Scope

This procedure covers all measurements to be done on concrete structures to establish conformance to specified concrete cover requirements.

2. Guidelines and Preparation

- a. The contractor is to complete a cover survey request and forward it to the engineer.
- b. The selected area for cover measurement is to be indicated on a sketch (see example attached).
- c. The responsible person must identify the area to be scanned, take measurements on the required date and calculate the results in terms of project specification.
- d. The cover meter is to be checked against a calibration box/block constructed with typical reinforcement of known parameters, on each day of use. Any deviations from actual measurement must be recorded on a Cover Survey Request.
- e. Cognizance shall be taken of the effect to cover depth measured, where spliced bars are measured in the same area as single bars (typically, the rebar diameter is increased by a factor of 1.44).
- f. The depth of cover shall be determined with equipment, complying with BS 1881, Part 204 and capable of identifying the location and depth of reinforcement on a scanned area. The results shall be recorded electronically by the equipment software.

- g. Measurements are to be taken in accordance with cover meter manufacturer's guidelines.
- h. The person responsible for measurements must indicate the position, dimension, type and splicing of reinforcement on the sketch for each scanned area.

3. Method of Measurement

Two methods of measurement are proposed as follows:

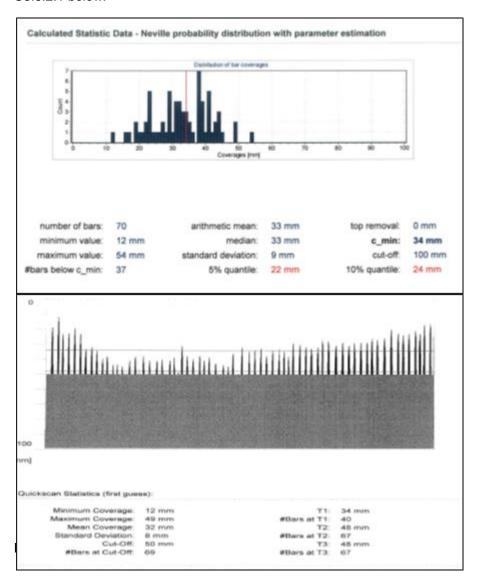
a. Quick/Linear Scan Method

- (i) Readings are to be taken perpendicular to the layer of rebar closest to the concrete surface for each scan area (+/- 30 per m²), so that an average cover to reinforcement can be determined for the tested area.
- (ii) Readings are to be taken to identify individual bars within each 1m². At least three cover readings, at 150mm spacing, per individual bar shall be shown in the test results but only the overall cover measurement would be used for payment purposes. Reports generated by the equipment shall be used for determining payment. Further specified cover to be reduced by 5mm (allowance for variation of equipment), before applying criteria as defined in table B8212/2a.
 - e.g. If specified cover is 40mm, the lower limit for full acceptance is:

 $(40 \text{ mm-5 mm}) \times 85\% = 30 \text{ mm}.$

(iii) Where more than 10% of readings are below specified lower limit, the area shall be re-scanned, by *Image*, *Block or Grid scan method*, to verify the average cover. Refer to item 3.2 below.

An example of Quick Scan information and presentation is shown in Figure C3.6.2.1 below.



b. Image/Block/Grid Scan Method

- (i) Readings are to be taken in both directions of a marked grid as per the equipment manufacturer's recommendations.
- (ii) This method shall be used to determine the average cover to reinforcement when more than 10% of the Quick/Linear Scan results do not meet the specified lower limit for overall cover.
- (iii) For purposes of calculation of the averages for cover of a rebar layer, readings exceeding upper limit (cover + 15mm) to be capped on upper limit. Further specified cover to be reduced by 5mm (allowance for variation of equipment), before applying criteria as defined in Table B8212/2a.
 - e.g. If specified cover is 40mm, the lower limit for full acceptance is:

 $(40 \text{ mm-5 mm}) \times 85\% = 30 \text{ mm}.$

An example of Image Scan information and presentation is shown in Figure C3.6.2.2 below:

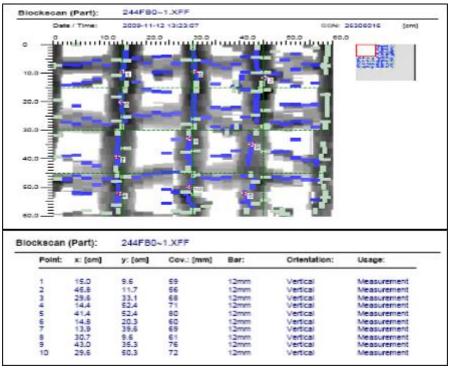


Figure C3.6.2.2: Example of a Imagescan output

If the equipment used is not able to provide the above presentation it has to be done manually by determining the grid of rebar, first and second layer closest to surface, and manually record readings in order to establish the depth of rebar, as shown in Figure C3.6.2.3 below.

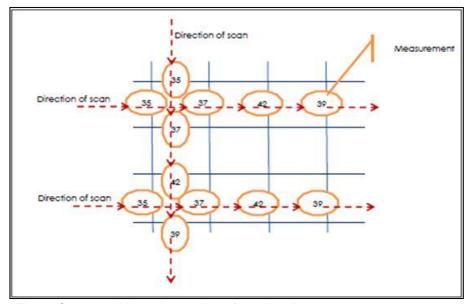


Figure C3.6.2.3: Manual recording of readings"

C3.7.3 PROVISION FOR OFFSITE TESTING

Specialised test not allowed for under C3.2.1, C3.2.2 and C3.2.3 shall be submitted to SANAS accredited laboratories for offsite testing. All offsite testing shall be in accordance with the works contract documentation and shall comply to SANS3001. The testing shall be conducted at a SANAS accredited facility that is accredited for the test method specified for the testing.

Only where not a single laboratory in the Republic of South Africa is accredited for the required test method may the testing be conducted by a laboratory that in not accredited for

the test method, and then only at a facility that is SANAS accredited for testing of the materials type that in being submitted.

From 1 January 2018 TMH1 test method accreditation is not be accepted as equivalent to accreditation of the SANS3001 test method.

C3.7.4 MEASUREMENT AND PAYMENT

Item

3.7.01 Specialised Equipment (specify type)

(i) Establishment (including supply of equipment)Lump Sum

(ii) OperationMonth

Payment for laboratory specialised equipment shall only be applicable to that laboratory equipment specified by the Employer in this payment item. Time related payment items (per month or pro rata for parts of a month) shall only be applicable once the equipment has been established on site and shall be no earlier than 14 days prior to the Contractor's programmed commencement date for the relevant construction operations and shall cease on completion of the specific operations.

The rate tendered under this specific item/s shall include for all costs as follows:

- All costs associated with loading, transporting and setting up the equipment on site
- Testing and calibration of equipment as specified in the relevant test methods and in accordance with the SANAS certification requirements
- Intermediate calibration as specified in the relevant test methods and SANAS certification requirements
- Removal of equipment from site on completion of the Works

Item Unit

3.7.02 Off-site testing (specialist tests)

- (a) Off-site materials testing by an external SANAS Accredited laboratoryProv. Sum
- (b) Handling costs in respect of item 3.7.02 (a)Percentage (%)

Expenditure under pay item 3.7.02(a) shall be for all laboratory testing of materials carried out off-site by the Main Laboratory or an external sub-service provider on the instruction of the Engineer.

The Engineer shall specify which facility shall be used.

The % tendered under 3.7.02(b) 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

The tenderer shall not be entitled to the handling cost if off-site testing is conducted at the Main Laboratory.

All pay items for which the unit of measurement is "month" are deemed to be based on 23 working days per month and shall become applicable only for use in calculations of approved extensions of time in terms of the Conditions of Contract:"

Unit

C3.8 OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

LIST OF ABBREVIATIONS

CR Construction Regulations

GAR General Administration Regulations

GSR General Safety Regulations

HCSR Hazardous Chemical Regulations

HIRA Hazard Identification and Risk Analysis

OHSA Occupational Health and Safety Act 85 of 1993

OHSS Occupational Health and Safety Specification

SANS South African National Standards

SANRAL South African National Roads Agency SOC Ltd

C3.8.1 INTRODUCTION

C3.8.1.1 PROJECT SCOPE

Part C4: Site Information for the Scope of the Project.

C3.8.1.2 KEY ROLE PLAYERS

Employer:

WSP Group Africa (Pty) Ltd

Client

The South African National Roads Agency SOC Limited

C3.8.1.3 COMPLEXITY, SPECIFIC PROJECT RISKS AND REQUIREMENTS

Design risks are generally those associated with the functioning of a general civil engineering site laboratory that includes the testing of soils, bitumen, stone, concrete, and the use of chemicals for the testing of stabilizing and bitumen materials. The tenderer must supply a full HIRA covering all the tests set out in this document.

C3.8.2 HEALTH AND SAFETY SPECIFICATION

C3.8.2.1 Purpose of the Occupational Health and Safety Specification

The OHSS is a performance specification to ensure that the Employer and any bodies that enter into formal agreements with the Employer viz. Agents, Consultants, Laboratory Contractors and Contractors achieve an acceptable level of OHS performance. No advice, approval of any document required by the OHSS such as hazard identification and risk assessment action plan or any other form of communication from the Employer shall be construed as an acceptance by the Employer of any obligation that absolves the Laboratory Contractor from achieving the required level of performance and compliance with legal requirements. Further, there is no acceptance of liability by the Employer which may result from the Laboratory Contractor failing to comply with the OHSS, i.e. the Laboratory Contractor remains responsible for achieving the required performance levels.

C3.8.2.2 Implementation of the Occupational Health and Safety Specification

This OHSS forms an integral part of the Contract, and Laboratory Contractors are required to make it an integral part of their Contracts with Contractors and Suppliers.

This specification must be read in conjunction with the OHS Act No 85 of 1993 (as amended)(The Act), and the Regulations thereto as amended from time to time.

The OHS Act Agreement in Section C1 of the Tender Document (Contract Forms) must be fully completed by the Contractor. These documents shall be deemed to form part of the Contact Documents.

No work is to be commenced without written approval of the H&S plan. Failure to comply with this requirement will result in a fine or stoppage of work, with no extension of time or allowable claims.

C3.8.2.3 Interpretations

Application

The OHSS contains clauses that are generally applicable to building / construction and that impose pro-active controls associated with activities that impact on human health and safety as they relate to plant and machinery.

Compliance to the requirements of the OHSA, Construction Regulations and General Safety Regulations is in addition to the requirements of the OHSS and is part of the Laboratory Contractor's responsibility. The Employer will through the Agents, as appointed, monitor that the Laboratory Contractor complies with the requirements of the OHSA and will not prescribe to the Laboratory Contractor how such compliance is achieved.

Definitions

The definitions used will be those set out in the Regulation Gazette No 7721 of 18 July 2003 with the following additions:

SANRAL: The South African National Roads Agency SOC Ltd

Employer: WSP Group Africa (Pty) Ltd

Engineer: Mr. M Muthen

Epidemic Disease:

Means a disease "affecting many persons at the same time and spreading from person to person in a locality where the disease is not permanently prevalent." The World Health Organization (WHO) further specifies *epidemic* as occurring at the level of a region or community.

Hazard:Source of exposure to danger

Hazard Identification and Risk Assessment (HIRA) and Risk Control:

Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Health and Safety Management Plan:

Means a site, activity or project specific documented plan in accordance with the client's health and safety specification, OHS Act and Regulations. (as per CR, 2014)

Induction Training:

Means once off introductory training on general health and safety issues given to all employees and visitors to the site before commencement of work on site.

Pandemic Disease:

Means an *epidemic* that has spread over a large area, that is, it's "prevalent throughout an entire country, continent, or the whole world."

Risk:

Means the probability or likelihood that a hazard can result in injury or damage.

Regulation/s:

Shall mean the relevant regulation/s promulgated in terms of the Occupational Health and Safety Act, 1993 (ACT NO. 85 of 1993).

Site:

Means the area in the possession of the Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas and haul roads that are reasonably required for the activities for the Laboratory Contractor, and approved for such use by the Engineer.

The Act:

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (ACT NO. 85 of 1993) and Regulations promulgated thereunder as amended from time to time

C3.8.3 REQUIREMENTS AT TENDER STAGE

Tenderers are reminded that the document that is submitted needs to be complete and as close as possible to the final product due to the time factor.

The prospective Laboratory Contractor shall make available the following with his completed Tender:

- (a) A project specific Health and Safety Plan in line with this project OHS specification which will be subject to approval by the Employer's appointed Health and Safety Agent. This must include all supporting documentation as required to verify that the H & S system is adequate for the project.
- (b) Hazard Identification and Risk Assessment Analysis appropriate to the project. Safety Data Sheets (SDSs) and chemical risks must be included in the HIRA.
- (c) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the OHS Act and Regulations
- (d) A valid Letter of Good Standing
- (e) At least one copy of minutes of previous Occupational Health and Safety Committee meetings and of Incident Investigation Reports for other projects of a similar nature undertaken by the Tenderer.

Failure to submit the foregoing with his Tender may lead to the conclusion that the Laboratory Contractor is not be able to carry out the work under the contract safely in accordance with the Construction Regulations and may result in the Tender being disqualified.

C3.8.4 NOTIFICATION OF COMMENCEMENT OF WORK

After award of the contract, but before commencement of work, the Laboratory Contractor shall notify the Provincial Director of the Department of Labour in writing that work is to commence in terms of the Construction Regulations 2014, Section 4. The notification must be done in the form of the pro forma given in Annexure 2 to the Construction Regulations.

A copy of the notification form must be kept on site, available for inspection by inspectors, Employer, Engineer, employees and persons on site. Proof of submission must also be provided.

Work will not commence without the Notification being correctly completed and signed by the Employer.

If there are any changes to the conditions given in the submission, a revised form (Annexure A) must be submitted to the Department of Labour.

C3.8.5 GUIDELINES FOR THE DEVELOPMENT OF A HEALTH & SAFETY PLAN

C3.8.5.1 Background

In terms of the Construction Regulations [Section 5.1(a)&(b)] of the Occupational Health and Safety Act, No 85 of 1993, the Employer is required to compile an Occupational Health and Safety Specification for each of its projects and the Laboratory Contractor, appointed by the Employer in terms of Section 5.1(k), is required to prepare an Occupational Health and Safety Plan.

This plan has to be prepared in terms of Section 7.1(a) and must be based on the requirements of the Employer's Occupational Health & Safety Specification, as well as the

OHS Act and any other legal standard incorporated under Section 44 of the OHS Act. In terms of Section 5.1(I), the Employer and the Laboratory Contractor are required to agree on the Occupational Health and Safety Plan before any work may commence.

C3.8.5.2 Framework for an Occupational Health and Safety Plan

Introduction

The Laboratory Contractor has to demonstrate to the Employer that he has a suitable and sufficiently documented Occupational Health and Safety Plan as well as the necessary competencies, experience and resources to perform the construction work safely.

This OHS plan shall, answer and if necessary amplify the requirements of the OHS specification outlined above.

The Laboratory Contractor is required to submit at, or before, commencement of work, the following documentation for perusal and verification by the Employer:

- (a) Management Structure including an organogram, this shall be populated with the names of the holders of the various posts as far as shall be practical at the start of the project but shall include, at a minimum, the names of the Laboratory Manager and the Laboratory Health and Safety officer with their CVs.
- (b) Letter of good standing issued by the Compensation Commissioner or licensed Compensation insurer.

Contents of an Occupational Health and Safety Plan

The Occupational Health and Safety Plan shall include the following:

- (a) An Occupational Health and Safety Management Programme
- (b) A Statement regarding the Communication and Management of the Work

C3.8.6 APPOINTMENT OF HEALTH AND SAFETY (H&S) PERSONNEL

C3.8.6.1 Supervision

In terms of Section 16 of the Act, the Chief Executive Officer of the Laboratory Contractor may delegate, in writing, part or all of his powers to a suitable person on the site.

The Laboratory Contractor shall appoint a full-time **Supervisor (Laboratory Manager)**, in writing, in terms of Regulation 6.1 of the Regulations with the duty of supervising the performance of the laboratory testing and field work.

One or more assistant managers may be appointed in terms of CR 6.2. All site supervisors must show evidence of basic training in Occupational Health and Safety.

C3.8.6.2 Laboratory Health and Safety Officer

The Laboratory Health and Safety Officer must be competent in the administration of Health and Safety in a site civil engineering laboratory and the CV submitted should reflect this.

The appointed person must have had formal training in Construction Health and Safety which would include SAMTRAC, NEBOSH or similar and exposure to the OHS Act and regulations. They should be eligible for registration as a Construction Health and Safety Officer with SACPCMP. A driver's license is essential.

Unless otherwise decided by the Engineer and/or the Health and Safety Agent, this may be a part-time position.

The Laboratory Health and Safety Officer shall liaise closely with the Construction Contractor's Health and Safety Officer.

C3.8.6.3 Health and safety representatives

In terms of **Regulations 17 and 18 of the Act (OHSA 1993)** the Laboratory Contractor shall appoint, in writing, a **health and safety representative** for <u>each work area</u>. Where more than 20 employees are employed in the work area the number of representatives must increase in relation to the number employed. The health and safety representatives must be elected from employees who are employed in a full-time capacity at a specific workplace and must be elected according to the wishes of the workforce.

Representatives from local labour can be appointed to represent such labour for the duration of the contract. The functions of the H&S Representatives are as outlined in the OH&S Act, Section 18.

C3.8.6.4 Health and safety committee

In terms of Section 17, 18 and 19 of the Act (OHSA 1993) the Laboratory Contractor (as employer), shall establish one or more health and safety committee(s) where there are two or more health and safety representatives at a workplace. The persons selected by the Laboratory Contractor to serve on the committee shall be designated in writing. The Contractor's Site Agent shall be a member of this committee. Health and Safety Committee members elected to represent the Contractor may not be more than the Health and Safety Representatives elected by the workforce that serve on the Committee.

The Health and Safety meetings must be held monthly. Any concerns raised at the meetings will form part of the monthly report and may be discussed at the site meeting.

C3.8.6.5 Competent persons

The appointment of competent persons to supervise parts of the work does not relieve the Laboratory Contractor from any of his responsibilities to comply with **all** requirements of the Construction Regulations.

The Laboratory Manager should have basic training in Occupational Health and Safety and be familiar with the requirements of the OHS Act and regulations.

The Health and Safety Officer whether full or part time must have training in the application of the OHS Act and Regulations, have a qualification equivalent to SAMTRAC or NEBOSH and be familiar with laboratory testing. He/she should be supplied with any equipment necessary to carry out the duties of an H&SO.

C3.8.7 PROJECT / SITE SPECIFIC REQUIREMENTS

A list of the testing required is given elsewhere in this document, all occupational health and safety risks engendered by this testing must be taken into account in the preparation of the HIRA for the Laboratory.

In addition, the following health risks should be taken into account. It may become necessary to include others according to the requirements of the project.

C3.8.7.1 Health risks

Health risks arising from the project must be identified and dealt with under the risk assessment for each activity.

C3.8.7.2 Noise Risks

The Laboratory Contractor, Contractor or owner of the machinery or equipment shall take noise level readings for each type of construction plant to be used on the project and establish a noise zone for each type in terms of Section 9 of the Noise-Induced Hearing Loss Regulations. Where required in terms of the Regulations, suitable hearing protective equipment shall be issued and worn. Where several items of laboratory equipment are in operation at or near to each other, the noise zone for the combined plant should be established and suitable hearing protective equipment used within this zone.

Based on the results of this monitoring, the contactor may have to make budgetary provision for the medical screening of all employees working in an area where the OEL is exceeded.

C3.8.7.3 Construction traffic

The Laboratory Contractor must state at what maximum speed traffic, shall be allowed to travel at on site and on haul roads. This limit must be strictly adhered to by the laboratory vehicles Unreasonable limits may be revised by the Engineer or OHS agent. On EPWP projects additional care must be taken where workers and construction traffic interface. This should be in the form of flagmen to direct trucks and adequate signage.

C3.8.7.4 Emergency Procedures

The Laboratory Contractor shall submit a detailed Emergency Procedure for approval by the Employer prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow. The procedure shall detail the response plan including the following key elements:

- (a) The name of the emergency response co-ordinator;
- (b) A list of persons competent to respond to an emergency and their duties.
- (c) Details of emergency services;
- (d) Actions or steps to be taken in the event of emergencies occurring on site
- (e) Information on hazardous material/situations;
- (f) A list of local providers of emergency response, if possible, arrangements should be made with these persons at the start of the project.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, major incidents/accidents, etc. The Laboratory Contractor shall advise the Employer, Agent, Engineer and all relevant authorities forthwith, of any emergencies, together with a record of action taken. This shall be confirmed in writing as soon as possible after the incident. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and available to site personnel. These procedures shall form part of the Health and Safety Plan.

C3.8.7.5 First Aid Boxes and First Aid Equipment

The Laboratory Contractor and all Contractors shall appoint in writing First Aider(s). If not already accredited, the appointed First Aider(s) are to be sent for accredited first aid training. Unless agreed with the Employer, at least one first aider shall be certified as Level 3. Valid certificates are to be kept on site. The Laboratory Contractor shall provide an on-site First Aid Station with first aid facilities, including first aid boxes containing, at least the requirements of the Annexure to Regulation 3 of the General Safety Regulations. All Laboratory Contractors with more than 5 employees shall supply their own first aid box. It is suggested that all supervisors carry a first aid kit in their vehicles at all times.

C3.8.7.6 Personal Protective Equipment (PPE) and Clothing

The Laboratory Contractor shall ensure that all workers, temporary or permanent, are issued with and shall wear hard hats, protective footwear, reflective bibs or vests and overalls as well as any other necessary PPE as set out in Section 2.3 of the General Safety Regulations and as identified as a control measure in the risk assessment of the activity.

Particular attention should be paid to the requirements for chemical and bitumen testing. Laboratory Contractors are must provide reflective jackets for all their staff.

The Laboratory Contractor and all Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times. This shall include necessary safety gear for visitors. The Laboratory Contractor shall clearly outline procedures to be taken when PPE or Clothing is:

- (a) Issued
- (b) Lost or stolen;
- (c) Worn out or damaged
- (d) Issued to temporary labour or staff.

The above procedure applies to Laboratory Contractors and their Contractors, as they are all Employers in their own right. Any person found on site without the necessary PPE, especially reflective jackets, will be removed from site until the PPE is supplied and worn.

In order to facilitate the payment for PPE as defined in Regulation C.03 the Contractor must set out his system for the procurement of PPE.

PPE must also be issued to the Consultant's staff, as set out in the Specifications or as requested by the Engineer.

C3.8.7.7 Medical Certificates and Medical Surveillance

Intake and exit medical certificates provided by a registered Occupational Health and Safety Practitioner must be obtained for all persons involved in:

- (a) Exposure to Hazardous chemicals (HCSR Section 7)
- (b) Working at Heights (CR Section 10.2(b))
- (c) Noise (noise induced hearing loss regulations, Section 8)
- (d) Operation of Construction Vehicles (CR Section 23.1(d)(ii))
- (e) "Listed" activities in terms of Section 12(1)(c) of the Act
- (f) Work where exposure to high levels of silica dust is involved
- (g) Any work involving risks to the skeleton-muscular system.

Environmental monitoring results and risk assessments are to be made available to the occupational health professionals doing the medical surveillance, as well as job specifications per job category. Annexure 3 "Medical Certificate of Fitness", to the Construction Regulation 2014, must be used for the purpose of this.

Workers need to be screened annually. Where new workers are employed, surveillance is required prior to commencing, annually if necessary and prior to exit. Permanent employees must be on an annual programme.

In the case of permanent employees of the Laboratory, Contractor or sub contractor, no payment will be made for these certificates as they are deemed to be already issued. In the case of temporary employees, payment will be made in terms of the payment item.

C3.8.7.8 Exposure to hazardous materials

The Laboratory Contractor shall, in his Health and Safety Plan, state what methods will be used to determine the exposure of workers to any hazardous materials used on site. Particular attention must be given to those who are exposed for long periods. This is particularly important in the cases of workers exposed to bituminous materials and the testing of them. Regular medical surveillance must form part of the Principle Contractor's Health and Safety Plan. The Health and Safety Plan must include statements as to how the risks will be dealt with.

C3.8.7.9 Occupational Health and Safety Signage

The Laboratory Contractor shall provide adequate on-site OHS signage. This should include but is not limited to: 'no unauthorised entry', 'report to site office', 'site office', and appropriate signage in the laboratory. This shall apply in particular to the storage of radioactive devices and hazardous chemicals in the appropriate positions. Signage shall be posted up at all entrances to the laboratory as well as on site in strategic locations e.g. where radioactive devices are being used and other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations and the "Code of Practice for the safe use of soil moisture and density gauges containing radioactive sources" as amended.

All excavations including trial pits shall be suitably guarded.

C3.8.7.10 Induction of employees and visitors

In terms of the Construction Regulations, Section 7.5,6 & 7 inductions must be carried out for employees and visitors to the site. The Contractor's Health and Safety Plan must set out how this will be done as well as how the entrance of visitors to the site will be regulated. The type of proof of induction contemplated in) Section 7.5,6 & 7 shall also be stated.

C3.8.7.11 Accommodation of Traffic

The Site Laboratory Manager shall liaise closely with the Construction Contractor's traffic officer so as to ensure safe travel on the site

C3.8.7.12 Use of Radioactive Equipment

The use of radioactive equipment for the measuring of compaction parameters shall conform to the requirements of the "Code of Practice for the safe use of soil moisture and density gauges containing radioactive sources" as published by the Department of Health: Directorate: Radiation Control Soil revised September 2001.

C3.8.7.13 Transportation of workers on site

Workers shall be transported to, from and on site according to both the provisions of Section 23 of the CR as well as the Road Traffic Act. Over and above this, Vehicles used shall have secure seats, seatbelts and be covered and the cover shall be securely fixed to the vehicle. No equipment or materials shall be transported in the same compartment of a vehicle at the same time as workers. Failure to transport workers in a safe manner will be regarded as a high level non-conformance per worker.

C3.8.7.14 Sampling on site

All sampling on site, whether from the roadway, excavations, conveyors, concrete mixers or other places shall be carried out in such a manner as to ensure the safety of the sampler and any assistants.

Sampling methods should be as set out in the relevant standards and test methods and should be included in the HIRA for the Laboratory.

C3.8.7.15 Communication on Site

All communication on site should be done through the Engineer's Representative to the Principle Contractor and be in writing. The use of briefing and debriefing sessions after audits is encouraged. The Departmental project manager must at all times be informed of what is happening on site.

C3.8.7.16 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.

The Contractor shall implement all legal requirements, as published from time to time in the government gazette, in relation the epidemic or pandemic and shall supply his employees with the required PPE free of charge.

C3.8.8 HEALTH AND SAFETY FILE

The Laboratory Contractor shall, in terms of Construction Regulation 7.1(b), maintain a Health and Safety File on site at all times. The Health and Safety File is a file or other permanent record containing information on aspects of the construction project that will be necessary to ensure the health and safety of any person who may be affected by the construction work.

The Laboratory Contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract. The Health and Safety file shall include at least the following information as required by the Act and Regulations including:-

- (a) Notification of construction work
- (b) Proof of registration with the Compensation Commissioner or FEMA
- (c) All reports of inspections and audits
- (d) All non-conformity reports
- (e) A record of all working drawings, calculations and design where applicable
- (f) Detailed list of Contractors with contact details
- (g) List of all hazardous materials used and stored on site with Data Sheets and Materials Hazard Data sheets
- (h) All Method Statements, Hazard Identification and Risk Assessments carried out for the project.
- (i) All Health and Safety Plans for the project.
- (j) All method statements
- (k) Minutes of relevant meetings
- (I) Incident records, including investigations and results
- (m) Record of all appointments under the Regulations
- (n) Medical certificates of fitness.
- (o) Record of Competencies
- (p) Training Records

The Health & Safety File shall be handed over to the Agent on completion of the contract. It must contain all the documentation as set out above, or as instructed, as well as any handed to the Laboratory Contractor by any subcontractors.

C3.8.9 RISK ASSESSMENT

Before commencement of any laboratory work during the construction period, which is not included in the initial H&S Plan, the Laboratory Contractor shall have a risk assessment performed and recorded in writing by a competent person; this shall be based on a method statement drawn up specifically for the task in question. (Refer Section 9 of the Construction Regulations 2014).

Risk is a measure of the likelihood that the harm from a particular hazard will be realised, taking into account the possible severity of the harm. Harm to people includes death, injury (permanent or temporary), physical or mental health or any combination thereof. Risk management in health and safety includes the identification of hazards, assessing risks, taking action to eliminate or reduce the risk, monitoring the effectiveness and performing regular reviews of the entire process. The Laboratory Contractor shall compile method statements to address or handle the following:

- (a) Hazards particulars to the contract
- (b) Identify what could go wrong and how
- (c) Identify the likelihood of this happening
- (d) Identify the persons at risk
- (e) Identify the extent of possible harm
- (f) Eliminating or reducing this risk
- (g) A monitoring plan
- (h) A review plan

Laboratory Contractors must ensure that all contractors conduct risk assessments for their scope of work as well.

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Laboratory Contractor.

The Laboratory Contractor shall ensure that his employees and other contractors affected by the operations of the Laboratory Contractor are informed, instructed and trained on the risk assessments, safe work procedures and control measures identified in the risk assessment, by a competent person.

The Employer reserves the right to make changes to this specification and HIRA should new items or changes in legislation require this. These changes will be agreed with the Contactor before implementation.

C3.8.10 ARRANGEMENTS FOR MONITORING AND REVIEW

The Employer, or his agent, will conduct a Monthly Audit to review compliance, as required by the Construction Regulation 5.1(o) to ensure that the Laboratory Contractor has implemented and is maintaining the agreed and approved OH&S Plan.

The Employer reserves the right to conduct other ad hoc audits and inspections as deemed necessary.

A representative of the Laboratory Contractor must accompany the Employer, or his agent, on all audits and inspections and may conduct his own audit/inspection at the same time. Each party will, however, take responsibility for the results of his own audit/inspection results.

C3.8.11 MEASUREMENT AND PAYMENT

Unit
 Compliance with the Occupational Health and Safety Act (85 of 1993) and Regulations including the Construction Regulations

The rate for this item must cover all expenses incurred in complying with the Occupational health and Safety Act (85 of 1993) and the regulations thereto including the Construction Regulations 2014.

(2014)_____Month

- (a) Preparation and approval of the project specific health and safety plan
- (b) The provision of personal protective Equipment as required by the project shall be included in this rates and will not be paid for separately
- (c) The provision of a properly qualified full time health and safety officer and all transport and equipment needed to enable the work to be carried out

- (d) The cost of all medical testing as required by the Construction Regulations 2014
- (e) The preparation of the close out report and file in electronic format
- (f) Any other costs incurred in compliance with the OHS Act and Regulations

All pay items for which the unit of measurement is "month" are deemed to be based on 23 working days per month and shall become applicable only for use in calculations of approved extensions of time in terms of the Conditions of Contract:"

C3.9 ACCREDITATION

C3.9.1 ACCREDITATION OF SITE LABORATORY FACILITY BY SANAS FOR ISO 17025

The service provider shall achieve full accreditation of the site laboratory facility no more than 12 months from the date of the commencement of the contract. The establishment date shall be mutually agreed between the service provider and the employer and shall be in accordance with the provisions in the Contact Conditions and Contract Data related to the commencement date. Accreditation shall be obtained from the South African National Accreditation System (SANAS) in accordance with the ISO 17025 standard. The accreditation shall be for the site laboratory facility. The schedule of Accreditation shall be in place for no less the 75% of the tests listed in tables C3.9.1.1 to C3.9.1.4. The date of establishment of each laboratory type shall be regarded as the commencement date for the tests listed in the relevant table.

TABLE C3.9.1.1 SOIL LABORATORY TEST METHODS TO BE ACCREDITED

DESCRIPTION	TEST METHOD
Sampling of Road Pavement Layers	TMH5 MA2 or MC1
Sampling from Stockpiles	TMH5 MB1
Sampling of Treated Pavement Layers	TMH5 MB10
Division of a Sample Using the Riffler	TMH5 MD1
Division of a Sample by Quartering	TMH5 MD2
Wet preparation and air-drying of samples for plasticity index and hydrometer tests	SANS 3001-GR5
Apparent density of crushed stone base	SANS 3001-AG22
Determination of in situ density using a nuclear density gauge	SANS 3001-NG5
Wet preparation and particle size analysis	SANS 3001-GR1
Determination of the one-point liquid limit, plastic limit, plasticity index and linear shrinkage	SANS 3001-GR10
Determination of the liquid limit with the two-point method	SANS 3001-GR11
Determination of the moisture content by oven-drying	SANS 3001-GR20
Determination of the maximum dry density and optimum moisture content	SANS 3001-GR30
Determination of the maximum dry density and optimum moisture content of laboratory mixed cementitiously stabilized materials	SANS 3001-GR31
Determination of the California bearing ratio	SANS 3001-GR40
Preparation, compaction and curing of specimens of laboratory mixed cementitiously stabilized materials	SANS 3001-GR50
Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum moisture content	SANS 3001-GR51
Determination of the unconfined compressive strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR53
Determination of the indirect tensile strength of compacted and cured specimens of cementitiously stabilized materials	SANS 3001-GR54
Determination of the initial stabilizer consumption of soils and gravels	SANS 3001-GR57

TABLE C3.9.1.2 CONCRETE LABORATORY TEST METHODS TO BE ACCREDITED

DESCRIPTION	TEST METHOD
Sampling of Freshly Mixed Concrete	TMH5 MB9
Particle size analysis of aggregates by sieving	SANS 3001-AG1
Determination of the bulk density, apparent density and water absorption of aggregate particles retained on the 5 mm sieve for road construction materials	SANS 3001-AG20

Determination of the bulk density, apparent density and water absorption of aggregate particles passing the 5 mm sieve for road construction materials	SANS 3001-AG21
Making and curing of test specimens	SANS 5861-3
Consistence of freshly mixed concrete - Slump test	SANS 5862-1
Compressive strength of hardened concrete	SANS 5863

TABLE C3.9.1.3 ASPHALT LABORATORY TEST METHODS TO BE ACCREDITED

DESCRIPTION	TEST METHOD
Sampling from Stockpiles	TMH5 MB1
Sampling of Bituminous Binders	TMH5 MB4
Sampling of Previously Blended (ready mixed) Asphalt	TMH5 MB7
Sampling of Asphalt or Concrete from completed layer or structure (Coring)	TMH5 MC2
Sampling and Sample Preparation of Modified Binders	TG1 MB1 AND MB2
Division of a Sample Using the Riffler	TMH5 MD1
Making of asphalt briquettes for Marshall tests and other specialized tests	SANS 3001-AS1
Particle size analysis of aggregates by sieving	SANS 3001-AG1
Determination of the flakiness index of coarse aggregate	SANS 3001-AG4
Sand equivalent value of fine aggregates	SANS 3001-AG5
Determination of the bulk density, apparent density and water absorption of aggregate particles retained on the 5 mm sieve for road construction materials	SANS 3001-AG20
Determination of the bulk density, apparent density and water absorption of aggregate particles passing the 5 mm sieve for road construction materials	SANS 3001-AG21
Determination of Marshall stability, flow and quotient	SANS 3001-AS2
Determination of bulk density and void content of compacted asphalt	SANS 3001-AS10
Determination of the maximum void-less density of asphalt mixes and the quantity of binder absorbed by the aggregate	SANS 3001-AS11
Determination of the soluble binder content and particle size analysis of an asphalt mix	SANS 3001-AS20
Determination of the in situ permeability of a bituminous surfacing (Marvil test)	SANS 3001-BT12
Standard Test Method for Penetration of Bituminous Materials	EN1426
Standard Test Method for Softening Point of Bitumen (Ring- and-Ball Apparatus	ASTM D36
Determination of in situ density using a nuclear density gauge	SANS 3001-NG5

Should a test method be listed in more than 1 (one) laboratory type, the accreditation of such a method will be linked to the laboratory type which was first established.

The accreditation schedule shall list at least the senior laboratory manager as a Technical Signatory for the first six months of accreditation. Thereafter the schedule of accreditation shall list both the senior laboratory manager (from the Lead Partner) and the most senior manager from the Targeted Partner (as specified in clause C3.9.2) as Technical signatories.

C3.9.2 DEVELOPMENT OF THE TARGETED PARTNER'S PERSONNEL

The service provider shall be responsible to ensure effective skills transfer to the targeted partner's laboratory manager. This shall be demonstrated thought the targeted partner's laboratory manager being included on the site laboratory's Schedule of Accreditation as a Technical Signatory. The inclusion shall be accomplished no later than 18 months after establishment of the laboratory. The establishment date shall be mutually agreed between the service provider and the employer and shall be in accordance with the provisions in the Contact Conditions and Contract Data related to the commencement date.

C3.9.3 MEASUREMENT AND PAYMENT

Item Unit

3.9.01 Accreditation of Site Laboratory facility by SANAS

- (a) Bonus for early achievement of SANAS ISO17025 accreditation of the site laboratory facility % per Month
- (b) Penalty for late achievement of SANAS ISO17025 accreditation of the site laboratory facility% per Month

The Unit of measurement for subitems 3.9.01 (a), (b) and (c) is month or pro-rata part thereof. The value of the Bonus or Penalty shall be calculated based on the total value of the interim payment certificate for the month in question. The value of the subitems 3.9.01 (a), (b) and (c) shall be <u>5,0%</u> of the certificate value for the full month. The value shall be increased or decreased on a pro-rata basis if the bonus or penalty is not to be calculated for the full month.

The bonus in subitem (a) is payable for meeting the requirement for accreditation before the end of the 12th month as measured from the date the laboratory was established on site. The schedule of accreditation for the site laboratory shall contain a minimum of 75% of the tests listed in Tables C3.9.1.1 to C3.9.1.4. The bonus shall be paid only if all the requirements of the specification are met.

The penalty under subitem (b) is enforceable for not meeting the accreditation requirements before the end of the 12th month as measured from the date the laboratory was established on site. The schedule of accreditation for the site laboratory shall contain a minimum of 75% of the tests listed in Tables C3.9.1.1 to C3.9.1.4. The penalty shall be applied should any of the requirements of the specification not be met

The penalty under subitem (c) is enforceable at any time after the end of the 12th month as measured from the date the laboratory was established on site. The schedule of accreditation for the site laboratory shall contain a minimum of 75% of the tests listed in Tables C3.9.1.1 to C3.9.1.4. The penalty shall be applied should any of the specification requirements not be met when a previously obtained accreditation is suspended or withdrawn in full or partially.

Item Unit

3.9.02 Technical Signatory

- (a) Bonus for early achievement of inclusion of the targeted partner's manager as technical signatory on the Schedule of Accreditation% per Month
- (b) Penalty for late achievement of inclusion of the targeted partner's manager as technical signatory on the Schedule of Accreditation% per Month
- (c) Penalty for suspension or withdrawal of the targeted partner's manager as technical signatory from the Schedule of Accreditation.....% per Month

The Unit of measurement for subitems 3.9.02 (a), (b) and (c) shall be month or pro-rata part thereof. The value of the Bonus or Penalty shall be calculated based on the total value of the interim payment certificate for the month in question. The value of the subitem 3.9.02 (a) shall be <u>1.5%</u> and the value for subitems 3.9.02 (b) and (c) shall be <u>5,0%</u> of the certificate value for the full month or decreased on a pro-rata basis of the bonus or penalty is not to be calculated for the full month.

The bonus in subitem (a) is payable for meeting the requirement for inclusion of the targeted partner's manager on the Schedule of Accreditation of the Site Laboratory as a Technical Signatory before the end of the 18th month as measure from the commencement date. The scope of the technical signatory shall not be less than 50% of the tests listed in Tables C3.9.1.1 to C3.9.1.4. The bonus shall be paid only if all the requirements of the specification is met.

The penalty in subitem (b) is enforceable for not meeting the requirements for inclusion of the targeted partner's manager on the Schedule of Accreditation of the Site Laboratory of the Site Laboratory as a Technical Signatory before the end of the 18th month as measure from the commencement date. The scope of the technical signatory shall not be less than 50% of the tests listed in Tables C3.9.1.1 to C3.9.1.4. The penalty shall be applied should any of the requirements of the specification not be met

The penalty in subitem (c) is enforceable at any time after the end of the 18th month as measured from the date the laboratory was established on site. The penalty shall be applied should any of the requirements of the specification not be met when previously obtained accreditation is suspended or withdrawn or the inclusion of the targeted partner's manager is suspended or withdrawn from the Schedule of Accreditation if full or partially.

All pay items for which the unit of measurement is "month" are deemed to be based on a calendar month and shall become applicable only for use in calculations of approved extensions of time in terms of the Conditions of Contract:"

PART C4: SITE INFORMATION

CONTRACT SANRAL N.003-030-2017/8 C-SL
SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL
ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD
INTERCHANGE (KM 9.0)

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Information Only

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

C4.1 DESCRIPTION OF THE WORKS

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

This project is for the upgrading of National route 3, section 3 from Gladys Manzi Road (km 5.9) to New England Road Interchange (km 9.0). The upgrade also includes the Market Road and Epworth interchanges. Refer to Appendix 1 for locality plan.

The project is located in the province of KwaZulu-Natal in the district municipality of Umgungundlovu and local municipality of Msunduzi.

C4.1.1 ROADWORKS

(a) General Description of Road Works:

A general list of the road construction activities to be undertaken on this project follows:

- Establishment of the contractor,
- Provision of housing, offices and laboratory for the engineer,
- Accommodation of traffic.
- Protection and arranging for relocation of services
- Clearing of the road reserve and the stripping of topsoil to stockpile for later use,
- Earthworks including spoiling unsuitable material,
- Removal and re-use of material on the N3 mainline,
- Widening of the N3 mainline from 2 lanes Northbound (NB) and 3 lanes Southbound (SB) and to 4 and 5 lanes respectively,
- Construction of concrete median barriers
- Construction of a new Diverging Diamond Interchange at Market Road,
- Handling, processing and producing asphalt and concrete mixes and using recovered material, commercial sources and the Employer's quarry and stockpiles at RCL 9.
- Construction of new pavement layerworks on the N3 mainline, and other roads
 - Construction of cement treated pavement subbase layers.
 - The construction of 250mm CRC pavement (CRCP), (labour enhanced construction),
 - The construction of asphalt base course on the interchange ramps, cross-roads and other roads.
 - Construction of Bitumen Rubber (N3) & Polymer modified asphalt surfacing (Ramps and other roads).
 - Asphalt and gravel surfacing of community access roads.
- The Construction and demolition of Bridges.
 - o Blackburrow Bridge over N3 demolish & reconstruct
 - Market Road Bridge A & B over N3
 - o Market Road Bridge over Cleland Road
 - Market Road over Rail Bridge
 - Gladys Manzi Bridge over N3 demolish and reconstruct
 - Epworth IC Bridge demolish and reconstruct
 - New Bridge: On Ramp B over Ramp A/CBD bridge
- Construction, extending existing, demolishing and rebuilding major box culverts
- Construction of Mechanically stabilised earth walls (MSEW) in high fills.
- Construction of Concrete retaining walls in cut embankments.

- Construction of minor drainage structures and the installation of pipe drainage systems and lengthening of existing pipe culverts
- Construction of new side and median drainage channels, inlets and outlets and associated erosion protection works, and gabions
- Installation of guardrails, fencing, signage, gantries and road-markings and roadstuds
- Small Contractor engagement and development, training and community liaison, and extending labour oppertunities within the local community
- Realigning and widening of Cleland Drive,
- Construction of new laybyes, walkways, pedestrian facilities and NMU facilities. generally at the following locations:
 - Intersection of Market Road and Van Eck Place
 - o Intersection of Cleland Road and Gladys Manzi Road
- Installation of traffic signals,
- Construction of Lighting on the N3 mainline and Market R I/C,
- Installation of Road sign gantries
- Installation of various types of Fencing, Road signs and road markings,
- Finishing of roadway and landscaping

(b) N3 Mainline

The existing horizontal alignment for the N3 northbound carriageway shall be maintained between km 5.9 and km 8.9. The N3 southbound carriageway's horizontal alignment shall be maintained from km 5.9 to km 7.2 and from km 8.4 to km 8.9.

Between km 7.2 and km 8.4 the existing southbound carriageway deviates from the alignment of the northbound carriageway to accommodate the southbound traffic from the Epworth Interchange (Alan Paton Avenue southbound on-ramp), and requires vehicles entering the N3 to merge with the fast lane of the N3. The southbound carriageway will therefore be realigned to match the horizontal alignment of the N3 northbound, and the Epworth Interchange will be realigned to merge with the future slow lane of the N3 southbound.

The existing cross section of the N3 will be widened from 2 (NB) and 3 (SB) lanes to 4 (NB) and 5 (SB) lanes per carriageway. This results in an average increase in surfaced width from 10.4m per carriageway to widths of between 17.4 m and 21.1m per carriageway.

This widening of the carriageways will be achieved through firstly widening to the inside by using the existing grassed median, and then to the outside where required. The realignment will introduce median widening at two left curves. The first median widening will be located between km 6.464 and km 7.033 with a maximum width of 5.185m, and the second between km 7.597 and km 8.176 with a maximum width of 2.950m.

The N3 southbound vertical alignment will also be realigned in relation to the N3 northbound carriageway between km 7.2 and km 8.4. A further improvement to the southbound carriageway will be at the vertical crest curves at km 6.990.

Vertical alignment adjustments and improvements along the N3 northbound carriageway comprise a crest curve improvement at km 7.010 and at the broken back curve between km 8.05 and km 8.40.

(c) Market Road Interchange

To improve capacity and traffic flow at the Market Road interchange, a Diverging Diamond Interchange (DDI) will replace the existing Trumpet interchange. The new DDI will not only increase the capacity of this interchange but also provide additional accessibility to the

east of the N3. This is achieved through a new link road from the interchange to the municipal road network via Cleland Road. Refer to the Figure C4.1 below for the layout of the DDI and connecting local roads.

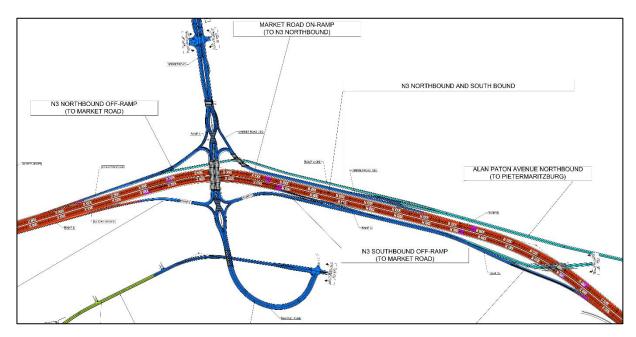


Figure C4.1: Market Road Diverging Diamond Interchange

(d) Local Roads

Apart from the new link road between the Market Road Interchange and Cleland Road east of the N3, further improvements have been applied to Market Road. West of the DDI, Market Road will be widened from 1 and 2 lanes per direction to 3 lanes per direction. This upgrade extends up to and includes the intersection with Washington Road (R103) as well as the intersection with Van Eck Place.

Cleland Road will be realigned both horizontally and vertically between the new intersection with Market Road and the realigned intersection with Gladys Manzi Road.

Gladys Manzi Road and Blackburrow Road will be realigned vertically to accommodate the new Bridge Overpasses over the N3. Gladys Manzi will be adjusted horizontally to allow for future widening from the current 1 lane per direction to 2 lanes per direction.

(e) Summary of Materials Quantities

The following Table C4.1 summarises the significant materials quantities anticipated for the project.

Table C4.1: Materials Quantities

Ref	Description	Unit	Quantity
B21.01	Open drain excavation	m ³	25 000
21.08	Subsoil drainage pipe	m	10 100
21.09	Polyethylene sheeting	m²	11 500
21.10	Synthetic-fibre filter fabric	m²	16 800
B22.03	Concrete pipe culverts	m	8 342

22.10	Welded steel fabric	kg	7 300
23.08	Concrete drains	m³	28 500
23.12 & B71.08	Welded steel fabric	kg	64 000
B33.01 & B33.21	Cut to Fill (from existing Prism)	m³	240 000
33.10	Roadbed Prep	m³	54 400
33.13	Finishing off cut/fill slopes	m²	346 000
B33.20 & B33.22	Fill to be imported (commercial/RCL9)	m³	61 000
35.01	Stabilised Subbase	m³	88 700
B35.02	Stabilising agent	ton	8 300
38.01 & 38.02	Milling & Excavating existing bituminous layers	m³	25 500
B38.04	Excavating other existing layers	m³	35 000
B41.01	Prime	litre	603 000
B42.01	Asphalt base	m²	142 415
B42.02	Asphalt surfacing	m ²	268 960
B42.04(a)	Bond coat	litre	105 000
B42.04(b)	bond coat for CRCP	litre	84 300
B57.03	Thermo-plastic road-marking paint	km	97
58.01	Trimming	m ²	273 000
B71.02	CRCP	m ²	123 400
B71.06	Tie Bars	No	133 500
B71.08	High tensile steel rebar	ton	2 900

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

(a) <u>Existing Pavement Information</u>

The construction of National Route 3, Section 3 from km 6, 80 to km 8, 80 was completed in about 1962. Pavement Management System records note that the original pavement structure comprised of:

- 100 mm Semi-gap graded asphalt (AS)
- 150 mm Subbase (G5)
- 300 mm Selected (G7)

Since 1972 different maintenance activities have taken place along the project route length, varying from asphalt overlays, concrete pavement overlays and milling and replacing of some slow lane sections. The maintenance history can be summarised as follows:

- For the section of the N3 up to the start of the concrete pavement at km 8,30
 - 2011 to 2013:Pothole patching and asphalt inlays
 - 2008: Mill and replace asphalt surfacing to 60 mm depth between km 6,90 and km 7,20 NB carriageway slow lane and km 8,02 to km 8,30 NB carriageway slow and fast lanes
 - o 1999: 35 mm Asphalt overlay
 - o 1984: 40 mm Asphalt overlay
 - 1972: Various pre-treatments and 40 mm Asphalt overlay

- For the section of the N3 from the start of the concrete pavement at km 8,30
 - 1984: 230 mm Jointed Concrete Pavement on 80 mm recycled Asphalt subbase or 100 mm cemented subbase

Hence the existing pavement is not uniform throughout. There is a high variability of pavement layers and surfacing within this short section (3km) of the N3 mainline, namely Continuously Reinforced Concrete (CRCP), Jointed Concrete Pavement (JCP) and Flexible. Figure C4.2 shows a schematic view of the pavement structure along the route for the northbound (NB) and southbound (SB) carriageways.

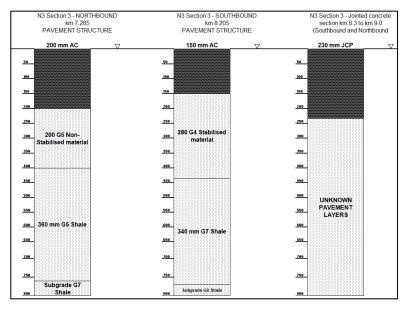


Figure C4.2: Existing pavement structure on N3 Section 3

(b) Pavement Designs for Upgrade

Figure C4.3 and C4.4 shows the pavement design for the upgrade works, for the various road sections comprising the upgrade works.

As indicated, a CRCP rigid pavement shall be be constructed on the N3 mainline, with a Bitumen Rubber surfacing. The CRCP for the N3 mainline is required to be constructed using labour based methods to maximise labour opportunities on the project.

All the other roads comprising the project shall be upgraded with flexible pavements, with an asphalt base over a cemented subbase and a Polymer modified surfacing.

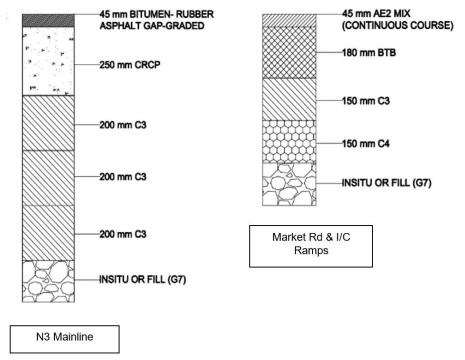


Figure C4.3: Pavement design structures for the N3 carriageways and for Market Road, Interchange Ramps and cross-roads.

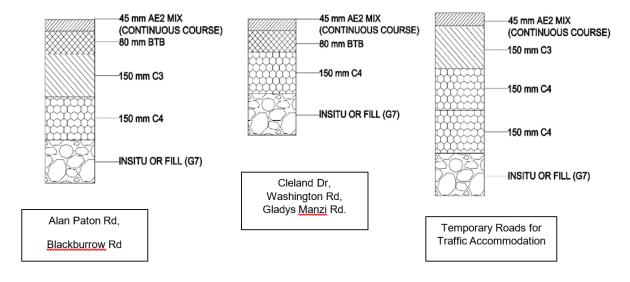


Figure C4.4: Pavement design structures for the other local roads and temporary roads

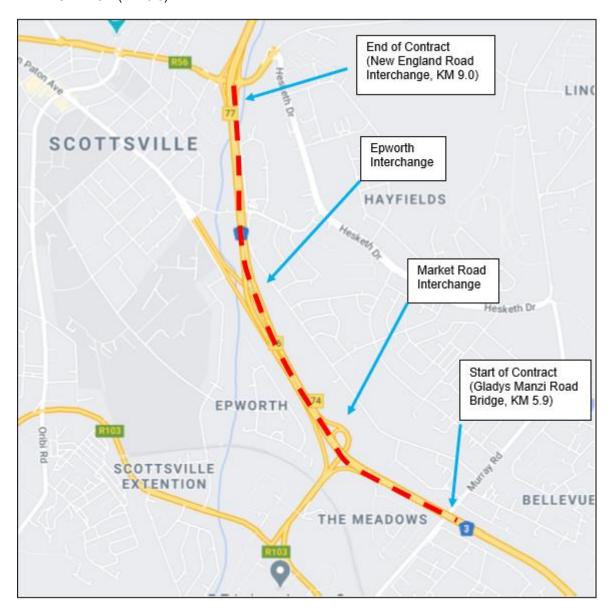
PART C5:ANNEXURES

ANNEXURES

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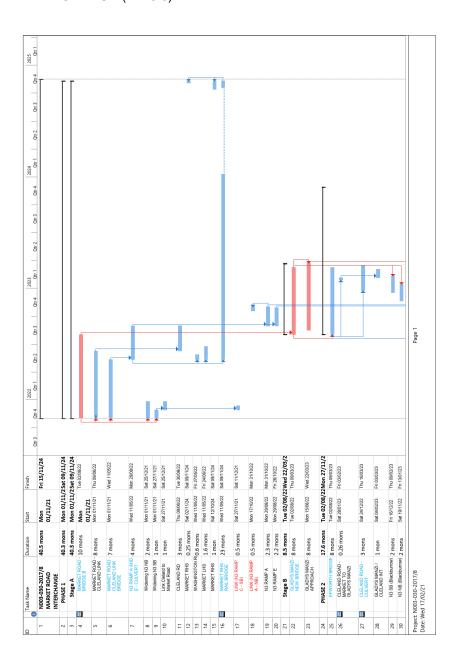
ANNEXURE A: LOCALITY PLAN

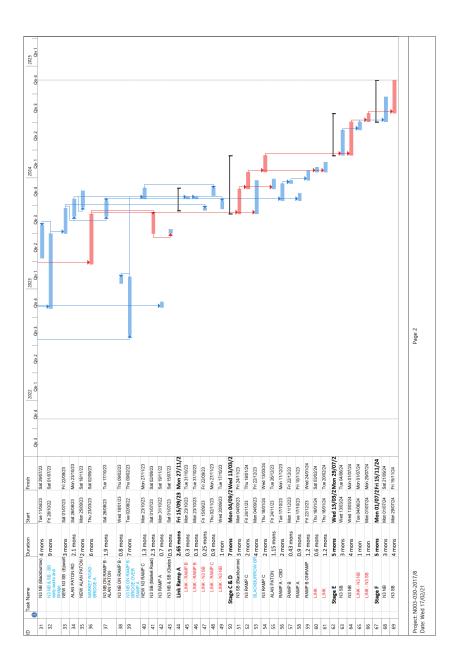
CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)



ANNEXURE B: PRELIMINARY CONSTRUCTION PROGRAMME

CONTRACT SANRAL N.003-030-2017/8 C-SL SUB-CONTRACT FOR SITE MATERIALS LABORATORY FOR THE UPGRADING OF NATIONAL ROUTE 3, SECTION 3 FROM GLADYS MANZI ROAD (KM 5.9) TO NEW ENGLAND ROAD INTERCHANGE (KM 9.0)





The preliminary construction programme is subject to change, pending the Contractor's updated works programme. The envisaged contract duration remains unchanged.

ANNEXURE C: ITIS PUBLIC USER REGISTRATION MANUAL



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.

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Revision History

Revision	Description of Change	Author	Effective Date
0	Initial Release	K Niebuhr	July 2018

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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.

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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

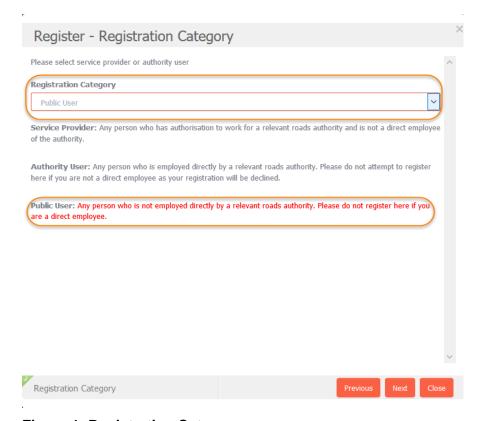


Figure 1: Registration Category

iii. Complete the User details form:

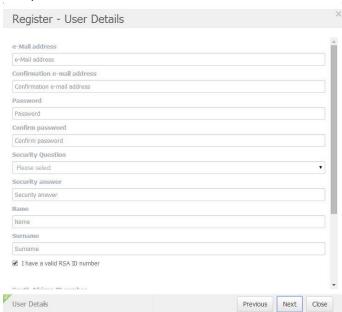


Figure 2: User Details

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.

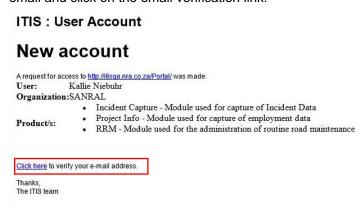


Figure 3: Verification Email

vii. After a successful email verification, you should be able to Login