

PANEL OF CONTRACTORS FOR THE MAINTENANCE OF ROADS AND STORMWATER, MINOR REHABILITATION, PATCHWORK, RESEAL AND GENERAL MAINTENANCE FOR THE CITY OF MBOMBELA, ON AN AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE (3) YEARS

TENDER NUMBER: COM76/2023B

TENDER FOR CATEGORY 6CE

TENDERER:	
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CLOSING DATE: 24 MAY 2024 AT 11:00

CSD REG NUMBER: MAAA.....

CLIENT	CONSULTING ENGINEER
<p>City of Mbombela P O Box 45 Mbombela 1200</p> <p>Contact Person: Benedict Mabunda Tel: (013) 759 9319 Fax: (013) 753 4444 E-mail: Benedict.Mabunda@mbombela.gov.za</p>	<p>Shuma Africa (Pty) Ltd P O Box 1644 Nelspruit 1200</p> <p>Tel: (013) 752 3658 E-mail: info@shumafrica.co.za</p>

PANEL OF CONTRACTORS FOR THE MAINTENANCE OF ROADS AND STORMWATER, MINOR REHABILITATION, PATCHWORK, RESEAL AND GENERAL MAINTENANCE FOR THE CITY OF MBOMBELA, ON AN AS AND WHEN REQUIRED BASIS: THREE (3) YEAR TERM

SUMMARY FOR TENDER OPENING PURPOSES

NAME OF TENDERER : _____

ADDRESS : _____

TELEPHONE NUMBER : _____

FAX NUMBER : _____

E-MAIL ADDRESS : _____

CLOSING DATE : _____

TENDERED AMOUNT : _____

Signed by authorised representative of the TENDERER: _____

DATE: _____

* Should any discrepancy occur between this figure and that stated in the Form of Offer and Acceptance, the latter shall take precedence and shall apply.

IMPORTANT INFORMATION

PLEASE READ CAREFULLY BEFORE COMPLETING DOCUMENT.

1. Notice to all tenderers.
2. Standards applied in this document.

1. NOTICE TO ALL TENDERERS

This is an original document:

1. It may not be re-typed or altered in any way.
2. It must be completed in black ink (non-erasable) – in an eligible handwriting. Mistakes are to be corrected by drawing a line through it and writing the correct information above it. Tenderer to sign next to the correction. The use of erasing fluid or strips is not allowed.
3. It may not be taken apart.
4. It is not available in electronic format except PDF.
5. Bidders are required to attach returnable documents to the relative pages (where requested) and encouraged to use file fasteners and binding tape or any other similar method to ensure there are no loose pages. **Any other form of presentation (loose pages or separate documents) will not be accepted.**

2. STANDARDS APPLICABLE TO THIS DOCUMENT

Available from the S.A. Federation of Civil Engineering Contractors, the S.A. Institution of Civil Engineering and the S.A. Bureau of Standards, as applicable:

- | | | |
|----|------------------------------|--|
| 1. | CIDB | <i>CIDB Standard for uniformity in Construction Procurement, 10 July 2015, as amended.</i> |
| 2. | SANS 10845-1 | <i>Processes, methods and procedures.</i> |
| 3. | SANS 10845-2 | <i>Formatting and compilation of procurement documentation.</i> |
| 4. | SANS 10845-3 | <i>Standard conditions of tender.</i> |
| 5. | GCC | <i>General Conditions of Contract for Construction Works, Third Edition (2015) issued by the South African institution of Civil Engineering.</i> |
| 6. | COLTO | <i>Standard Specifications for Road and Bridge Works for State Road Authorities (1998)</i> |
| 7. | This Document, as presented. | |

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THE TENDER

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T 1.2	Tender Data	(pink)

PART T2 RETURNABLE DOCUMENTS

(See List of Documents)

(yellow)

THE CONTRACT

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PART T1: TENDERING PROCEDURES

<u>SECTION</u>	<u>DESCRIPTION</u>
T 1.1	Tender Notice and Invitation to Tender
T 1.2	Tender Data

PART T2: RETURNABLE DOCUMENTS

<u>SECTION</u>	<u>DESCRIPTION</u>
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PART T1 TENDERING PROCEDURES

T1.1 TENDER NOTICE AND INVITATION TO TENDER T1.1-1
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T1.1 TENDER NOTICE AND INVITATION FOR PROPOSALS

Bids are hereby invited from experienced services providers for the Panel of Contractors for the maintenance of roads and stormwater, minor rehabilitation, patchwork, reseal and general maintenance for the City of Mbombela, on an as and when required basis for a period of three (3) years.

Tender No	Description	CIDB Grading	Compulsory Briefing Session	Closing Date
COM76/2023B	PANEL OF CONTRACTORS FOR THE MAINTENANCE OF ROADS AND STORMWATER, MINOR REHABILITATION, PATCHWORK, RESEAL AND GENERAL MAINTENANCE FOR THE CITY OF MBOMBELA, ON AN AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE (3) YEARS	6CE OR HIGHER	26 APRIL 2024 AT 1 NEL STREET, MBOMBELA CIVIC CENTRE HALL AT 10:00	24 MAY 2024 TIME: 11:00

It is compulsory that service providers download a copy of the bid document that will **ONLY** be available as from 19 April 2024 on the municipal website: www.mbombela.gov.za on the tenders and notices folder and National e-Tender Portal: www.etenders.gov.za, free of charge.

Duly completed bid documents and supporting documents which are, COPY OF TAX COMPLIANCE STATUS, CERTIFIED COPY OF B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE TO CLAIM B-BBEE POINTS, CURRENT MUNICIPAL RATES AND TAXES CLEARANCE FROM RELEVANT LOCAL AUTHORITY OR PROOF OF RESIDENCE FROM A TRIBAL AUTHORITY OR LEASE AGREEMENT ACCOMPANIED WITH THE LESSOR'S UP-TO-DATE MUNICIPAL RATES AND TAXES CERTIFICATE FOR BOTH THE BUSINESS AND ACTIVE BUSINESS DIRECTORS INCLUDING JV/CONSORTIUM PARTNERS, CSD REGISTRATION FULL REPORT (Summary Report will not be considered) and a copy of the COMPANY REGISTRATION CERTIFICATE, together with the bid document must be sealed in an envelope clearly marked: "TENDER NO.: COM76/2023B - PANEL OF CONTRACTORS FOR THE MAINTENANCE OF ROADS AND STORMWATER, MINOR REHABILITATION, PATCHWORK, RESEAL AND GENERAL MAINTENANCE FOR THE CITY OF MBOMBELA, ON AN AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE (3) YEARS, CLOSING DATE: 24 MAY 2024" with the name of the bidder shall be placed in the bid box at MBOMBELA CIVIC CENTRE at 1 NEL STREET, MBOMBELA, before 11:00 on the closing date.

Bidders are advised not to commit fraudulent activities or forge documents. All abusers of the SCM system, including forging or faking of returnable documents, may be reported to SAPS and restricted from doing business with any Public Institutions for a period NOT exceeding 10 years which is in line with section 28 and 29 of the Prevention and Combating of Corrupt Activities Act 12 of 2004.

A preferential point system shall apply whereby this contract will be allocated to a bidder in accordance with the **Preferential Procurement Policy Framework Act, No 5 of 2000** and as defined in the conditions of bid in the bid document, read in conjunction with the Preferential Procurement Regulations, 2022, where 80 points will be allocated in respect of price and 20 points in respect of the **Targeted Goals**.

Procurement Enquiries : Mr Christopher Nkambule (013) 759 2358
 Technical Enquires : Mr Benedict Mabunda (013) 759 9319
 Employer : City Manager, Mr Wiseman Khumalo
 City of Mbombela
 P. O. Box 45
 1200
 Mbombela

VISIT OUR WEBSITE – www.mbombela.gov.za

NB: the results of this bid will be published on council's website as prescribed on section 75(1)(g) of the MFMA and section 23(c) of the SCM Regulations.

T1.2 TENDER DATA

The conditions of tender are the standard conditions of tender as contained in SANS 10845-3 Construction procurement, Part 3: Standard conditions of tender that apply specifically to this tender.

The Tender Data shall be read with the Standard Conditions of Tender in order to expand on the Tenderer's obligations and the Employer's undertakings in administering the tender process in respect of the project under construction.

The Tender Data hereafter shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced to the clause in the standard conditions of tender to which it mainly applies.

Clause Number	Data
	<p>The conditions of tender are those contained in the latest edition of SANS 10845-3, Construction Procurement – Part 3: Standard conditions of tender.</p> <p>SANS 10845-3 makes 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 provisions of SANS 10845-3.</p> <p>Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.</p>
3.1	The Employer is: City of Mbombela, 1 Nel Street, Mbombela, 1200
3.2	<p>The tender documents issued by the Employer comprise:</p> <p>THE TENDER</p> <p>Part T1 Tendering Procedures</p> <p>Part T1.1 Tender Notice and Invitation to Tender (white)</p> <p>Part T1.2 Tender Data (pink)</p> <p>Part T1.3 Preferential Procurement Policy of City of Mbombela (pink)</p> <p>Part T2 Returnable Documents</p> <p>Part T2.1 List of Returnable Documents (yellow)</p> <p>Part T2.2 Returnable Schedules to be completed by the Tenderer (yellow)</p> <p>Part T2.3 Returnable Schedules II (yellow)</p> <p>THE CONTRACT</p> <p>Part C1 Agreement and Contract Data</p> <p>C1.1 Form of Offer and Acceptance (pink)</p> <p>C1.2 Contract Data (yellow)</p> <p>C1.3 Schedule of Deviations (white)</p> <p>C1.4 Contract Data (white)</p> <p>C1.5 Form of Guarantee (white)</p> <p>Part C2 Pricing Data</p> <p>C2.1 Pricing Assumptions (yellow)</p> <p>C2.2 Bill of Quantities and Information Sheets (yellow)</p>

	<p>Part C3 Scope of Works</p> <p>C3.1 Description of Works (blue) C3.2 Engineering (blue) C3.3 Procurement (blue) C3.4 Construction (blue) C3.5 Management of the Works (blue) C3.6 Health and Safety (blue)</p> <p>Part C4 Site Information</p> <p>C4 Site Information (green)</p> <p>Appendices</p> <p>Annexure A Occupational Health and Safety Specification (white) Annexure B Drawings for Tender Purposes (white)</p>								
3.4	<p>The Employer's Agent is:</p> <p>Name: Shuma Africa (Pty) Ltd Address: PO Box 1644 Nelspruit 1200 Tel: 013 752 3658 E-mail: info@shumafrica.co.za</p>								
3.5	<p>The language for communications is English.</p>								
3.6	<p>The competitive negotiation procedure shall not be applied.</p>								
4.1	<p>Only those tenderers who satisfy the following eligibility criteria and who provide the required evidence in their tender submissions are eligible to submit tenders and have their tenders evaluated:</p> <p>a) CIDB registration</p> <p>Only those tenderers who are registered with the CIDB, or are capable of being registered prior to the evaluation of submissions, in a Contractor grading designation equal to or higher than a Contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a 6CE of construction work, are eligible to have their tenders evaluated.</p> <p>Tenderers registered as potentially emerging enterprises but with a CIDB Contractor grading designation lower than a Contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations, are not eligible to have their tenders evaluated.</p> <p>For the sake of clarity and subject to satisfactory proof of a tenderer's ability to perform the work specified at the tendered value, the Employer lists in the table below the margins it considers reasonable. However, in the event that the sum tendered exceeds the margins shown then such tender shall be deemed non-responsive.</p> <table border="1" data-bbox="344 1496 1139 1666"> <thead> <tr> <th>Category of tender</th> <th>Upper limits per CIDB Table 8 Regulation 17</th> </tr> </thead> <tbody> <tr> <td>CE 4</td> <td>R 6</td> </tr> <tr> <td>CE 5</td> <td>R 10</td> </tr> <tr> <td>CE 6</td> <td>R 20m</td> </tr> </tbody> </table> <p>Joint Ventures are eligible to submit bids provided that:</p> <ol style="list-style-type: none"> (1) every member of the joint venture is registered with the CIDB; (2) the combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for a 6CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. 	Category of tender	Upper limits per CIDB Table 8 Regulation 17	CE 4	R 6	CE 5	R 10	CE 6	R 20m
Category of tender	Upper limits per CIDB Table 8 Regulation 17								
CE 4	R 6								
CE 5	R 10								
CE 6	R 20m								

	<p>b) Key Personnel</p> <p>In order to be considered for an appointment in terms of this tender, the tenderer must have in its permanent employment key personnel who will be the single point accountability and responsibility for the management of the construction works. Alternatively, a signed undertaking from an organization having the required personnel, stating that they will undertake the necessary work on behalf of the tenderer in terms of a sub-Contractor agreement, will be acceptable. Such undertaking must be attached to Forms T of the Returnable Schedules.</p> <p>Individuals must be identified for each of the key personnel listed under Forms T. Where the key personnel are no longer available to undertake the necessary work after the award of the tender, the Contractor shall within a period of 14 working days replace the key personnel listed in Forms T with personnel with equivalent competencies and subject to approval by the Employer. Such approval shall not be unreasonably withheld.</p> <p>The key person shall be a suitably qualified and experienced contracts manager who will be the single point accountability and responsibility for the management of the construction works, and who is registered with SACPCMP as Pr.CM or ECSA as Pr.Eng or Pr.Tech.Eng shall be required as a minimum.</p> <p>Where the Contracts Manager will not be employed on the Works full time, his powers will be delegated to the approved construction manager.</p> <p>Failure to comply with the requirements or to complete Form T may render the tender non- responsive.</p>
4.6	<p>Bidders are encouraged to revisit the City's website regularly prior the closing date particularly on this project folder to ensure that all addenda/ erratum that may be issued are adhered to.</p> <p>Failure to apply instructions contained in addenda may render a tenderer's offer non-responsive in terms of Condition of Tender 5.8.</p>
4.7	<p>The arrangements for the compulsory clarification meeting are as stated in the tender notice and invitation to tender, item T1.1.</p> <p>The onus rests with the tenderer to ensure that the person attending the clarification meeting on its behalf is appropriately qualified to understand all directives and clarifications given at that meeting.</p> <p>The clarification meeting shall start strictly at the time advertised. Only then will the Employer's Representative circulate the attendance register for completion by those present. During this time latecomers may complete the register. On completion by all present the Employer's Representative will:</p> <p>(a) read out from the collected lists calling for confirmation that all have signed;</p> <p>The signature on the attendance register and duly completed and signed Form A shall be considered proof that the tenderer attended the whole meeting and was available to hear all directives and clarifications given at the meeting.</p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be received only from those tendering entities appearing on the attendance list. The City will not be taking responsibility for incorrect information provided by the bidder on the attendance register.</p>
4.8	Request clarifications at least 7 working days before the closing time.
4.10	Tenderers are required to state the rates and currencies in Rand.
	<p>An alternative tender offer will only be considered if a main tender offer, strictly in accordance with all the requirements of the tender document is also submitted.</p> <p>If the tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.</p>

4.12	<p>Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.</p> <p>The modified Tender Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.</p>
4.13.1	<p>Parts of each tender offer communicated on paper shall be submitted as an <u>original</u>, no copies are required.</p> <p>The signed print-out shall be taken as the valid submission.</p>
4.13 4.15	<p>The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:</p> <p>Location of tender box: City of Mbombela Physical address: 1 Nel Street, Mbombela 1200 Identification details: COM76/2023B, PANEL OF CONTRACTORS FOR THE MAINTENANCE OF ROADS AND STORMWATER, MINOR REHABILITATION, PATCHWORK, RESEAL AND GENERAL MAINTENANCE FOR THE CITY OF MBOMBELA, ON AN AS AND WHEN REQUIRED BASIS: THREE (3) YEAR TERM. Tenders can be submitted 24 hours a day from Monday to Friday at the Employer's address.</p> <p>It is in the tenderer's interest to ensure that the delivery of the tender offer is recorded in the Employer's tenders received register.</p>
4.13.4	<p>The tenderer is required to submit all certificates as listed in the Schedule of Tender Compliance (Form U).</p>
4.13.5	<p>Place and seal the printed and completed tender document in an envelope clearly marked "TENDER" and bearing the Employer's name, the contract number and description, the tenderer's authorised representative's name, the tenderer's postal address and contact telephone numbers.</p>
4.13.5	<p>A two-envelope procedure will not be followed.</p>
4.13.6	<p>Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.</p>
4.15	<p>The closing time for submission of tender offer is as stated in the Tender Notice and Invitation to Tender.</p>
4.16.1	<p>The tender offer validity period is 120 days.</p>
4.16.2	<p>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:</p> <p>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 4.18 or 5.9,</p> <p>such tenderer shall be barred from tendering on any of the Employer's future tenders for a period to be determined by the Employer, but not less than six (6) months, from the date of tender closure. The Employer may fully or partly exempt a tenderer from the provisions of this condition if he is of the opinion that the circumstances justify the exemption.</p>
4.18	<p>Any additional information requested under this clause must be provided within 5 (five) working days of date of request.</p>

5.1	The Employer shall respond to clarifications received up to 7 working days before tender closing time.
5.2	The Employer shall issue addenda until 7 working days before tender closing time.
5.4	All bid responses must be submitted before the Bid Closing date and time as stipulated on the tender invitation.
5.7	In the event of disqualification, the Employer may, at its sole discretion, impose a specified period during which tender offers will not be accepted from the offending tenderer and report same to CIDB and National Treasury.
5.9	<p>Arithmetical errors, omissions, discrepancies and imbalanced unit rates</p> <p>Check responsive tender offers for:</p> <ul style="list-style-type: none"> 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) imbalanced unit rates. <p>Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers.</p> <p>Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows:</p> <ul style="list-style-type: none"> 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. <p>Where there is an omission of a line item, no correction is possible, and the offer may be declared non-responsive.</p> <p>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.</p> <p>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.</p>

5.10	<p>List of disqualifying factors of this tender are as follows:</p> <p>A bid not complying with the requirements stated hereunder will be regarded as “non-Responsive”, and as such will be rejected/disqualified for further evaluation</p> <ul style="list-style-type: none"> • Submit company registration certificate • Submit Tax Compliance Status issued by SARS • Full CSD report NOT older than 30 days from the closing date, Summary report will NOT be considered • Submit Joint venture agreement in case of JV. All parties are expected to attach their individual returnable documents except for consolidated B-BBEE certificate and combined CIDB grading. • Submit original certified identity document of business directors • Authority for Signatory, duly signed and dated original or certified copy on the Company(s) Letterhead. This condition will not apply to companies owned by one director / member / sole • Submit copies of relevant Annual Financial Statements (last 3 Financial Years). For JV, relevant Annual Financial Statements from all parties are required. Failure to provide for all the service Providers will results in disqualification. • Submit copy of an active CIDB Contractor grading designation of 6CE. For JV, a combined CIDB grading is required. • The Tenderer must provide valid copy of current municipal rates and taxes statement from relevant local authority / proof of residential from tribal authority (if the business is operating or the directors are residing in rural areas) / lease agreement with the lessor’s up-to-date municipal rates and taxes statement for both the company and for the active directors including JV/Consortium partners. Prospective bidders should ensure that the physical address details of the company and directors reflected on the CSD is similar to the one reflected on the company registration certificate. The municipality reserves the right to verify both the municipal rates and taxes of the company details reflected on the CSD and company registration certificates. The municipality further reserves the right to use ID numbers of the directors to verify if any municipal rates and taxes are not owned by each director. It is prudent and remains the responsibilities of the prospective bidders to ensure that each director, lessor and company rates are cleared with regards to the municipal rates and taxes • Letter of good standing for COIDA. The letter of good standing must reflect the relevant nature of business as prescribed on The Compensation for Occupational Injuries and Diseases Act 130 of 1993. See classification of industries attached. • Letter of Intent for Public Liability Insurance for the value of R 5 Million Rand. • All certificates, appointment letters of company experience, completion certificates of company experience, proof of ownership on plant and equipment, qualification certificates of personnel with Identity Documents must be certified by the commissioner of Oaths, RSA. It must have date of certification and not older than 3 months. A copy of a certified copy will not be accepted. • Fully completed and signed where applicable in the Returnable Schedules. • Failure to apply instructions contained in addenda that may be issued. • Submissions from bidders who did not attend a compulsory briefing session will not be acceptable. • Prospective service providers may not make any alterations or additions to the Bid document, except to comply with instructions issued by the Employer. The tender document must be furnished with non-erasable black ink and all corrections made by the service provider should be dated and signed by the authorized signatory. Erasures and the use of masking fluid, tippex, pencil or erasable ink are prohibited and failure to adhere to this condition will render your submission non responsive.
A 5.11	<p>EVALUATION METHODOLOGY</p> <p>Tenders will be evaluated for preference, compliance and functionality. It is important that the relevant information is included to enable the bid to be evaluated in accordance with the procedure outlined below. All supporting information must be submitted. Failure to comply with the above requirements will result in the Tender being disqualified.</p> <p>The service provider will be evaluated as per the criteria set out. Each must acquire the minimum points for the tender to be considered to be responsive.</p>

The Tender evaluation will be conducted as follows:

1(a) First

The tenderers will be verified against a pre-qualifying criterion in terms of the Preferential Procurement Policy Framework Act, 2000: Preferential procurement regulations, 2022.

A tenderer must submit proof of its B-BBEE status level of contributor.

1(b) Second

Tender documents shall be submitted as downloaded and printed from the website without any alterations.

1(c) Third

Tenders will be checked for compliance with Tender Conditions and administrative responsiveness. Non-compliance with any of the requirements will render the tender non-responsive and it will not be carried forward to the next stage.

1(d) Fourth

The Tenderer's company experience, Key Personnel, Plant and equipment and Financial References will be evaluated. Each tender will be assessed and awarded points for Functionality. Failure to achieve **70 points** out of the 100 for Functionality will render the tender non-responsive.

5.11.8	Scoring preferences.			
	Up to 100 minus W₁ tender evaluation points will be awarded to tenderers who submit responsive tenders and who are found to be eligible for the preference claimed. Points are based on a tenderer's scorecard measured in terms of the Regulations (2022) to the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000).			
	Points awarded will be according to a tenderer's specific goals summarised in the table below:			
	Item No.	The specific goals allocated points in terms of this tender	Number of points allocated (20)	Number of points allocated (10)
	1.	100% Black owned enterprises within the definition of the HDI	2	1
	2.	At least 30% women owned enterprises	2	1
	3.	At least 30% youth owned enterprises	2	1
	4.	At least 30% enterprises people living with disabilities	2	1
	5.	Enterprises regarded as EMEs located within the City of Mbombela	2	1
	6.	Enterprise who will sub-contract minimum of 30% of the contract value to EME's in the ward or local communities where the services to be rendered of works to be undertaken (Bidders shall list sub-contracting works or items)	2	1
7.	Corporate Social Investment (CSI) Plan. (see notes below)	5	3	
8.	B-BBEE level 1 contribution (SANAS verified B-BBEE certificate for generic enterprise, and for EME and SME a sworn affidavit or CIPC issued certificate confirming annual turnover and level of Black Ownership)	3	1	
Total		20	10	
Eligibility for preference points will be determined as follows:				
<input type="checkbox"/> Compliance with any other information requested to be attached to Returnable Schedule Form D.				

Description of quality criteria	Maximum number of points
Company Experience	50
Key Personnel	25
Plant and equipment	15
Financial References	10
Total evaluation points for quality (Ms)	100

Tender offers will only be considered responsive if the minimum quality requirement of **70 points** is achieved.

Tenderers are required to demonstrate their ability to undertake the work and provide proof of previous experience, expertise and availability of plant and equipment to undertake a project of this nature. Tenderers are therefore required to meet a minimum Quality Score of 70% (70 points out of 100) based on the criteria listed below. A score of less than 70 out of 100 points for Quality will render the tender non-responsive. The onus rests with the Tenderer to supply sufficient information to allow for evaluation and award of points detailed below. If insufficient information is provided, zero points will be awarded for that particular item.

Note that Quality points are only used to determine responsiveness and will not be used further in the evaluation.

5.11.9

- i). Plant and Equipment (Maximum 15 points)
Details of owned and hired plant and equipment are to be entered in Form R of the Returnable Schedules.
- ii). Key Personnel (Maximum 25 points)
Details of key personnel and their experience and qualifications are to be entered in Form T of the Returnable Schedules.
- iii). Roads Maintenance Experience (Maximum 50 points)
Details of roads and stormwater maintenance, minor rehabilitation, patchwork and reseal related projects & supporting information in terms of the points to be claimed in terms of quality, must be entered in Form Q in the Returnable Schedule.
- iv). Financial References (Maximum 10 points)
Details of financial references are to be entered in Form S of the Returnable Schedules.

5.13	<p>In addition to the requirements of the Condition of Tender, offers will only be accepted if:</p> <ul style="list-style-type: none"> • the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/). CSD is compulsory for any company to bid. The full report should be submitted, not the summary and must not be older than 30 days from the closing date. • the tenderer is in good standing with SARS according to the Central Supplier Database. • the tenderer is registered with the Construction Industry Development Board in an appropriate Contractor grading designation. • the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; • the tenderer has not: <ul style="list-style-type: none"> i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; • the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the Employer or potentially compromise the tender process; • the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; • the Employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely. • No Tippex has been used on the bid document. • The tenderer has not used an erasable pen and completed the bid document with a pencil.
5.17	The number of paper copies of the signed contract to be provided by the Employer is One.
5.19	All requests shall be in writing.

CHECKLIST FOR RETURNABLE DOCUMENTS STIPULATED UNDER SPECIAL CONDITIONS OF TENDER DOCUMENTS AS MANDATORY REQUIREMENTS. THIS DOCUMENT SHALL BE APPLICABLE TO ALL TENDER DOCUMENTS OF THE CITY.

Preamble

The objective of this checklist is aimed at ensuring that interpretation and application of the special conditions and other mandatory requirements at Bid Evaluation Committee (BEC) & Bid Adjudication Committee (BAC) are aligned as envisaged by the Bid Specification Committee (BSC). This will enhance consistency and uniformity in the entire bid committee system whilst promoting “user friendly” principles by simplifying tender requirements to all interested prospective bidders.

ITEM NO:	DESCRIPTION / RETURNABLE DOCUMENTS	NOTES	FOR OFFICE USE ONLY	
			CHECKLIST	YES or NO or N/A
1.	Company Registration Certificate	a) It's a certificate issued by the Companies and Intellectual Property Commission in line with section 14 of the Companies Act 78 of 2008 b) A Certificate issued by CIPRO in line with section 2 of the Close Corporation Act 69 of 1984 NB: The registration of Close Corporations (CCs) was replaced by introduction of the New Companies Act which came to effect in April 2011. CCs to be recognized as valid registration certificate will be up to 2010.	Has the bidders attached a valid company registration document in line with the applicable legislation?	
2.	Company Profile	a) A Company Profile is a professional introduction of your Business that aims to inform Clients about its purpose, vision, trustworthiness, products and services, and experience of your Company. It is basically a “CV for your Business/Company”	Has the bidder attached a company profile and its experience is relevant to add value on this project?	

<p>3.</p>	<p>Certification of documents to be submitted together with the tender document.</p> <p>I.e. ID Copies of business owners, qualifications, Licenses and certificates, accreditation by professional bodies, proof of ownership document, appointment letters, completion certificates, etc.</p>	<p>a) The certification of documents must be done by a commissioner of oath as prescribed in the Justices of the Peace and Commissioners of Oaths Act 16 of 1963 and its Regulations.</p> <p>b) Acceptable certified copies are copies originally certified from any police station, post office, Lawyers or <u>notary public</u> (who are members of a recognised professional body), Actuaries or accountants (who are members of a recognised professional body), Members of the judiciary, Directors, managers or company secretaries of a banks or regulated financial services business.</p> <p>c) <i>Commissioner of Oaths stamps can be purchased at Stationary shops, but it can be custom made following the below example:</i></p> <div data-bbox="770 700 1525 995" style="border: 1px solid black; padding: 5px;"> <p>CERTIFIED TRUE COPY OF THE ORIGINAL DOCUMENT. THERE ARE NO INDICATIONS THAT THE ORIGINAL DOCUMENT HAS BEEN ALTERED BY UNAUTHORISED PERSONS.</p> <p>Designation (rank)ex officio: RSA</p> <p>Date: Place</p> <p>Business Address:</p> <p>.....</p> <p>.....</p> <p>Commissioner of Oaths</p> <p>.....</p> <p>Signature Full Names</p> </div> <p>NB: All certified copies must NOT exceed three months and be originally certified.</p>	<p>Has the bidder certified all documents to be certified as per special conditions of bid?</p> <p>Check validity on the date, check if the commissioner of oaths stamp is compliant as per example copied from the Regulations.</p>	
<p>4.</p>	<p>Central Supplier Database (CSD) Full report, (Summary report will NOT be acceptable). N/B CSD Report date should not be more than 30 days before Bid closing date.</p>	<p>a) The City requires that all prospective bidders should be registered on CSD. This is aimed at verification of email addresses, phone numbers, banking details, company registration numbers, tax status with SARS, state employees, etc.</p>	<p>Has the bidder attached a full CSD report, are tax matters in good order, are the directors not in the employment of any state and the CSD report is not older than 30 days from the closing date?</p>	

<p>5.</p>	<p>Tax Compliant Status (TCS)</p>	<p>a) Prospective bidders are required to attach a valid TCS together with the tender document.</p>	<p>Has the bidder attached a valid (not expired) TCS? The designated official should verify the bidder's tax compliance status prior to finalization of the award of a bid or prize quotation. Where the recommended bidder is not tax compliant, the bidders should be notified of their non-compliant status and the bidder must be requested to submit to the City within 7 working days, written proof from SARS of their tax compliance status or proof from SARS that they have made arrangements to meet their outstanding tax obligations. The proof of tax compliance status submitted by the bidder to the City must be verified via the CSD report or e-Filing. The City should reject a bid submitted by the bidder if such a bidder fails to provide proof of tax compliance status within</p>	
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			the timeframe stated above (See MFMA Circular No: 90) .	
6.	Certified copy of B-BBEE Certificate / affidavit for B-BBEE status level of contributor (to claim points only) .	<p>a) EMEs in terms of the B-BBEE Act 53 of 2002 JUNE submit a sworn affidavit confirming annual total revenue and level of black ownership or Certified Copy of B-BBEE Certificate.</p> <p>b) Bidders other than EMEs and QSEs MUST submit their certified copies of valid B-BBEE status level verification certificate, substantiating their B-BBEE rating issued by a registered auditor approved by IRBA or a verification agency accredited by SANAS.</p> <p>c) A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.</p> <p>NB: There is NO consolidated affidavit for B-BBEE status level of contributor. Only consolidated B-BBEE certificate will be considered for JVs / Consortium & large companies that are making an annual turnover in excess of R50 million including value added tax (VAT). <i>This is not a disqualifying factor, non-adherence will lead to no allocation of B-BBEE points.</i></p>	<p>Is the copy B-BBEE Certificate valid?</p> <p>Is the sworn affidavit for EME / QSE in line with the threshold for EME and EME and valid?</p> <p>If the tendering entity is a JV / Consortium / Large company, has the bidder attached a certified copy of a valid and consolidated B-BBEE certificate in order to claim points as prescribed by the MSCM Regulations?</p> <p>Is the copy of B-BEE certificate certified by the Commissioner of Oaths reflects as prescribe on the regulations of the Act?</p> <p>Is the affidavit for B-BBEE stamped and signed by commissioner of oaths?</p> <p>I.e. full names and signature, force/practice number, designation / rank, date and address.</p> <p>Is the certification date not older than 3 months</p>	

			and original ink is clear on the document to confirm if it is originally certified?	
7.	Formal agreement must be attached in case of a joint venture (JV) or consortium.	a) The JV/consortium must amongst others, reflect clear profit and losses sharing percentages. It is compulsory that the lead partner must have at least 51% majority shares in the JV/consortium.	If the tendering entity / bidder is a JV/Consortium, has the bidder attached a detailed JV/Consortium agreement with all critical information?	
8.	In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit separate required returnable documents.	a) This will not be applicable to functionality and B-BBEE requirements.	If the tendering entity / bidder is a JV/Consortium, have the parties involved attached all individual required documents as per special condition of bid?	
9.	<p>Latest municipal rates and taxes certificates from relevant local authority for the business and all business directors</p> <p style="text-align: center;">OR</p> <p>Proof of resident from tribal authority for the business and all business directors</p> <p style="text-align: center;">OR</p> <p>Lease agreement with the Lessor's latest municipal rates and taxes certificates from relevant local authority.</p> <p>NB: All accounts owing any municipality for more than 90 days will be disqualified as prescribed on the MSCM Regulations.</p>	<p>a) If the business is operated and its director(s) are residing within a municipal area, bidders are expected to attach latest municipal rate and taxes certificates for the business and ALL its directors.</p> <p>b) If the business is operated and its director(s) are residing within a tribal authority. Bidders are expected to attach proof of resident for the business and ALL its directors.</p> <p>c) If the business directors are leasing a facility for residential purposes, they are required to attach individual lease agreement with lessor's latest municipal rates and taxes for a facility is within a Municipal boundary and if the business is renting office / business facility, the bidders are required to attach lease agreement for the business with lessor's latest municipal rates and taxes for a facility within a municipal boundary. If the facility</p>	<p>Has the bidder attached latest municipal rates and taxes from relevant local authority for the company / business and all company directors / owners?</p> <p>In case of lease, has the bidders attached lease agreements and lessor's proof of res from a tribal authority or latest municipal rates and taxes certificate?</p> <p>Is the account not in areas for more than 90 days (3 months)?</p>	

		<p>leased is in a rural area, lease agreement will be accompanied with the lessor's proof of residential from a tribal authority.</p> <p>NB: <i>Domicilium citandi at executandi</i>: Domicilium citandi et executandi is a Latin legal term meaning the address nominated by a bidder in a legal contract where legal notices may be sent.</p> <p>Bidders are encouraged to update their addresses when they relocate their businesses and the preferred address on the CSD should be in line with the address on the Company Registration Document. It is the responsibility of the bidder to ensure that all physical addresses reflected either on the company registration document and CSD are not owing any municipal rates and taxes for more than three months including the Lessor's municipal account in case of lease.</p> <p>The rationale behind this requirement is the enhance revenue in RSA municipalities as enshrined on the Municipal Systems Act 32, 2000. Failure to attach is an immediate disqualification but failure to align addresses will not be a disqualifying factor, however all addresses reflected on the both the CSD and company registration document will be subjected to this requirement.</p>		
10.	<p><u>Forging of documents/certificates</u></p> <p>The City has noted that prospective bidders are allegedly submitting fraudulent and forged documents when bidding for tenders.</p> <p>Bidders are advised not to commit fraudulent activities and forge documents. The City will ensure that this Act is adhered to by reporting all abusers of the SCM system to SAPS and enlist them on the Register of Tender Defaulters as prescribed on section 29 of the Prevention and Combating of Corrupt Activities Act</p>	<p>Section 34(1)(b) of the Prevention and Combating of Corrupt Activities Act 12 of 2004, stipulates that: "<i>any person who holds a position of authority and who knows or ought reasonably to have known or suspected that any other person has committed the offence of theft, fraud, extortion, forgery or uttering a forged document involving an amount of R100 000 or more, must report such knowledge or suspicion or cause such knowledge or suspicion to be reported to any police official</i>".</p> <p>Section 34(2) of the same Act stipulates that: "<i>subject to the provision of section 37(2), any person who fails to comply with subsection (1), is guilty of an offence</i>".</p>	<p>Are there any suspicious / alleged fraudulent or forged documents?</p> <p>If yes, has the matter been reported to the nearest SAPS following correct institutional protocol?</p> <p>Has the matter been registered with the Registrar to enable due processes and per the Act?</p> <p>NB: The minutes of the</p>	

	12 of 2004. Abusers of the SCM system, amongst other penalties, may be restricted to do business with any Public Institutions for a period NOT exceeding 10 years (see section 28 of this Act).		BEC / BAC should detail all the elements of alleged fraud and forged documents.	
11.	Copy of Public Liability insurance. Only insurance covers from registered and authorized financial service providers will be accepted.	a) Public liability insurance may vary from one project to another on the basis of the level of risk and complexity of the project. Minimum cover to be determined by the BSC prior consultation with the project manager if deemed necessary.	If applicable, is the bidder compliant with the minimum cover stipulated in the bid document? Is the public liability insurance from a registered financial institution?	
12.	Recent audited / independently reviewed financial statements for three consecutive years. NB: if a company provides any financial statements in terms of section 29 of the Companies Act, such statements must comply with the provision of the Act.	a) Applicable to private companies that are not managed by its owners, if: <ul style="list-style-type: none"> - It compiles its financial statement internally and its public interest score is less than 100. - It has its financial statements compiled independently and its public interest score is between 100 and 349. - the public interest score is 350 points or more, is required for an audit to be conducted. 	Has the bidder furnished MBD 5 as mandatory for all projects estimated to be in excess of R10 million? Has the bidder attached the relevant AFS as required by law and is it aligned with his/her declaration on MBD 5? False / mismatched / inconsistent declaration may lead to immediate disqualification.	
13.	Recent annual financial statement (AFS) for three consecutive years (unaudited AFS). NB: if a company provides any financial statements in terms of section 29 of the Companies Act, such statements must comply with	a) Applicable to private companies with a public interest score of less than 100. b) If, with respect to a particular company, every person who is a holder of, or has a beneficial interest in, any securities issued by that company is also a director of the company, that company is exempt from the requirements in this section to	Has the bidders furnished MBD 5 as mandatory? Has the bidder attached the relevant AFS as required by law in line with his/her declaration	

	the provision of the Act.	<p>have its annual financial statements audited or independently reviewed.</p> <p>NB: An independent review will suffice if the company has opted to have its financial statement audited or is required by its Memorandum of Incorporation (MOI) to do so.</p>	on MBD 5?	
14.	Functionality / Quality for evaluation of complex projects	<p>a) Functionality test refers to evaluation of bidders on various aspects of the contract to establish if the bidders has the capabilities to execute the contract or not. The various aspect may include but not limited to: track record and experience on similar projects, human resource and their individual experience, financial capabilities, relevant technology, etc.</p> <p>NB: Functionality will not be compulsory for all projects but for complex projects. Functionality criteria will vary from one project to another.</p>	<p>Has the bidder met the minimum threshold on functionality in order to qualify for further evaluation on price and B-BBEE?</p> <p>Has the bidders been scored in line with the evaluation criteria set on the tender document?</p> <p>All portfolio of evidence attached and certified as stated on the bid document?</p>	
15.	The Compensation for Occupation Injuries and Diseases Act 130 of 1993 (COIDA)	<p>a) The COIDA provides for compensation for disablement caused by occupational injuries or diseases sustained or contracted by employees in the course of their employment, or for death resulting from such injuries or diseases, hence bidders are expected to attach COIDA certificates in line with their specialize area aligned to the type/nature of business.</p>	<p>If applicable, is the COIDA certification / letter of good standing attached, valid and reflects the nature of work in line with the scope of works?</p>	

PART T2 RETURNABLE DOCUMENTS

PART T2: RETURNABLE DOCUMENTS

1. Failure to fully complete the **compulsory** returnable documents shall render such a tender offer unresponsive.
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 or on behalf of the Employer, 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 willful misrepresentation by that tenderer to induce the contract.** In such event the Employer has the discretionary right under contract condition 9.2 to terminate the contract.

The Tenderer must complete the following returnable Schedules:

Returnable Schedules required for Tender evaluation purposes

COMPULSORY TENDER DOCUMENTS	
FORM A	CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING
FORM B	RECORD OF ADDENDA TO TENDER DOCUMENTS
FORM C	PROPOSED AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES
FORM D	PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022
FORM E	COMPULSORY DECLARATION
FORM F	MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS
FORM G	CERTIFICATE OF INDEPENDENT TENDER
FORM H	DECLARATION OF GOOD STANDING REGARDING TAX
FORM I	DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES
FORM J	REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE
FORM K	DECLARATION OF TENDERER'S LITIGATION HISTORY
FORM L	AUTHORITY OF SIGNATORY
FORM M	SCHEDULE OF SPECIALIST SUBCONTRACTORS
FORM N	PROOF OF GOOD STANDING WITH COMPENSATION COMMISSIONER
FORM O	SCHEDULE OF CURRENT COMMITMENTS
FORM P	REGISTRATION WITH CIDB
RETURNABLE FOR QUALITY CRITERIA	
FORM Q	COMPANY EXPERIENCE IN RELATION TO SCOPE OF WORKS
FORM R	PLANT & EQUIPMENT
FORM S	FINANCIAL RESOURCES
FORM T	KEY PERSONNEL EXPERIENCE AND QUALIFICATIONS
CERTIFICATE FOR TENDER COMPLIANCE	
FORM U	SCHEDULE OF TENDER COMPLIANCE

COMPULSORY TENDER DOCUMENTS

FORM A: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

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.

This is to certify that I,

representative of (tenderer)

of (address)

.....

.....

telephone number

fax number

e-mail

attended the clarification meeting on (date)

Signature of Representative: _____

Signature of Project Manager: _____

FORM B: RECORD OF ADDENDA TO TENDER DOCUMENTS_(SIPDM)

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
▪		
▪		
▪		
▪		
▪		
▪		
▪		
▪		
▪		

Attach additional pages if more space is required.

Signed Date

Name Position

FORM C: PROPOSED AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES_(SIPDM)

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause 5.8 of SANS 10845-3 regarding the Employer's handling of material deviations and qualifications.

(a) AMENDMENTS

Page, Clause or Item No	Proposed Amendment

Note: (1) Amendments to the General and Special Conditions of Contract are not acceptable.

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

(This is not an invitation for alternatives but should the Tenderer desire to make any departures for the provisions of this contract he shall set out his proposals clearly hereunder.

(b) ALTERNATIVES

Proposed Alternative	Description of Alternative

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

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

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

Signed

Date

Name

Position

FORM D: PREFERENTIAL PROCUREMENT REGULATIONS 2022**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022**

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 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Compliance and Functionality
- (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	80
SPECIFIC GOALS	20
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.

2. 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).

3. 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:

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT**3.2.1. POINTS AWARDED FOR PRICE**

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

$$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right) \quad \text{or} \quad Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. 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 preference point system.

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

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

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

Item no.	The specific goals allocated points in terms of this tender	Number of points allocated (20)	Number of points claimed (20) (To be completed by the tenderer)
1.	100% Black owned enterprises within the definition of the HDI	2	
2.	At least 30% women owned enterprises	2	
3.	At least 30% youth owned enterprises	2	
4.	At least 30% enterprises people living with disabilities	2	
5.	Enterprises regarded as EMEs located within the City of Mbombela	2	
6	Enterprise who will sub-contract minimum of 30% of the contract value to EME's in the ward or local communities where the services to be rendered of works to be undertaken (Bidders shall list sub-contracting works or items)	2	
-*-7	Corporate Social Investment (CSI) Plan. (see notes below)	5	
8	B-BBEE level 1 contribution (SANAS verified B-BBEE certificate for generic enterprise, and for EME and SME a sworn affidavit or CIPC issued certificate confirming annual turnover and level of Black Ownership)	3	

The City will utilize the CSD report for the above-mentioned information

Corporate Social Investment (CSI)

NB: The minimum total value of the CSI should not be less than 2% of the total project value excluding vat and contingencies. The CSI project should be delivered concurrently with the project. The final product should be delivered prior to the issuing of completion certificate. The nature of the CSI project must benefit the community at large. (1 page, Arial font size 12) Prospective bidders will be expected to provide the City with a written explanation on how to implement the Corporate Service Investment on that particular ward, community or region. The investment must benefit the community at large. In order to claim points, a detailed one page report must be included in the list of returnable documents. The corporate social investment initiatives must be implemented by the company/successful bidder. The final details of the CSI project will be finalized prior to the signing of the contract in consultations with relevant stakeholders.

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited
- Non-Profit Company
- State Owned Company

[TICK APPLICABLE BOX]

4.6. 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.

Declaration

The tenderer declares that

- a) the tendering entity is a level contributor as stated in the submitted evidence of qualification as at the closing date for submissions
- b) the tendering entity has been measured in terms of the following code (tick applicable box)
 - Generic code of good practice
 - Other – specify
.....
- c) the contents of the declarations made in terms of a) and b) above are within my personal knowledge and are to the best of my belief both true and correct

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the tenderer, confirms that he / she understands the conditions under which such preferences are granted and confirms that the tenderer satisfies the conditions pertaining to the granting of tender preferences.

Signature:

Name:

Duly authorised to sign on behalf of:

Telephone:

Fax: Date:

Name of witnessSignature of witness

Note:

1) Failure to complete the declaration will lead to the rejection of a claim for a preference. Supporting documentation of the abovementioned claim for a preference must be submitted with the tender submission to be eligible for a preference. (see Clause 5.11.8 in Tender Data)

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

FORM E: COMPULSORY DECLARATION (SIPDM)

The following particulars must be furnished. In the case of a joint venture, separate declaration in respect of each partner must be completed and submitted.

Section 1: Enterprise Details**Name of Enterprise**

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Particulars of companies and close corporations Company / Close Corporation registration number.

--	--

Section 3: SARS Information

Tax reference number	
VAT registration number	<i>State Not registered if Not Registered for VAT</i>

Section 5: National Treasury Central Supplier Database

Supplier number	
Unique registration reference number	

Section 6: Particulars of principals

principal: means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporation Act, 1984, (Act No. 69 of 1984).

Full name of principal	Identity number	Personal tax reference number

*insert separate page if necessary

Section 7: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following:

- a) a member of any municipal council an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999)
- b) a member of any provincial legislature member of an accounting authority of any national or provincial public entity
- c) a member of the National Assembly or the National Council of Province
- 1. a member of the board of directors of any municipal entity
- 2. an official of any municipality or municipal entity an employee of Parliament or an employee of Parliament or a provincial legislature

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

Name of principal	Name of institution, public office, board or organ of state and position held	Status of service <i>(tick appropriate column)</i>	
		Current	Within last 12 months

*insert separate page if necessary

Section 8: Record of family member in the service of the state

family member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption.

Indicate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months been in the service of any of the following:

- d) a member of any municipal council an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999)
- e) a member of any provincial legislature member of an accounting authority of any national or provincial public entity
- f) a member of the National Assembly or the National Council of Province
- 3. a member of the board of directors of any municipal entity
- 4. an official of any municipality or municipal entity an employee of Parliament or an employee of Parliament or a provincial legislature

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

Name of principal	Name of institution, public office, board or organ of state and position held	Status of service <i>(tick appropriate column)</i>	
		Current	Within last 12 months

*insert separate page if necessary

Section 9: Record of termination of previous contracts with an organ of state

Was any contract between the tendering entity including any of its joint venture partners terminated during the past 5 years for reasons other than the Employer no longer requiring such works or the Employer failing to make payment in terms of the contract.

Yes No (Tick appropriate box)

If yes, provide particulars (insert separate page if necessary)

Section 10: Declaration

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my personal knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:

neither the name of the tendering entity or any of its principals appears on:

a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004).

National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)

ii) neither the tendering entity or any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);

iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);

iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers

v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of contract etc.) or intention to not win a tender;

vi) has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;

vii) neither the tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;

SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subContractors who are subcontracted to execute a portion of the contract that is entered into in excess of the threshold prescribed by the National Treasury, for SARS to do likewise.

Signed: _____

Date: _____

Name: _____

Position: _____

NOTE 1 The Standard Conditions of Tender contained in SANS 10845-3 prohibits anticompetitive practices (clause 3.1) and requires that tenderers avoid conflicts of interest, only submit a tender offer if the tenderer or any of his principals is not under any restriction to do business with Employer (4.1.1) and submit only one tender either as a single tendering entity or as a member in a joint venture (clause 4.13.1). Clause 5.7 also empowers the Employer to disqualify any tenderer who engages in fraudulent and corrupt practice. Clause 3.1 also requires tenderers to comply with all legal obligations.

NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. organs of state and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and provincial departments listed in schedule 2 of the Public Service Act, and provincial government components listed in Part B of schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public Service Act of 1994 or persons performing similar functions in organs of state from conducting business with the State or to be a director of a public or private company conducting business with the State. The offence for doing so is a fine or imprisonment for a period not exceeding 5 years or both. It is also a serious misconduct which may result in the termination of employment by the Employer.

NOTE 3: Regulation 44 of Supply Chain Management regulations issued in terms of the Municipal Finance Management Act of 2003 requires that organs of state and municipal entities not award a contract to a person who is the service of the state, a director, manager or principal shareholder in the service of the state or who has been in the service of the state in the previous twelve months.

NOTE: 4: Regulation 45 of Supply Chain Management regulations requires a municipality or municipal entity to disclose in the notes to the annual statements particulars of any award made to a close family member in the service of the state.

NOTE: 5 Corrupt activities which give rise to an offence in terms of the Prevention and Combating of Corrupt Activities Act of 2004) include improperly influencing in any way the procurement of any contract, the fixing of the price, consideration or other moneys stipulated or otherwise provided for in any contract and the manipulating by any means of the award of a tender.

NOTE: 6 Section 4 of the Competition Act of 1998 prohibits restrictive horizontal practice including agreements between parties in a horizontal relationship which have the effect of substantially preventing or lessening competition, directly or indirectly fixing prices or dividing markets or constitute collusive tendering. Section 5 also prohibits restrictive vertical practices. Any restrictive practices that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties.

ATTACH THE FOLLOWING DOCUMENTS TO THIS PAGE

- **For Closed Corporations**

CK1 or CK2 as applicable (Founding Statement) Certified Copies of the ID's of the Directors Certified Shareholders Certificate

OR

- **For Companies**

A copy of the Certificate of Incorporation Certified Copies of the ID's of the Directors, and Certified shareholders' register

OR

- **For Joint Venture Agreements**

- Joint Venture Agreement between all the parties,
- as well as the documents in (1) or (2) of each Joint Venture member.

OR

- **For Partnership**

1. Copies of the ID's of the partners

OR

- **One person Business / Sole trader**

2. Copy of ID

FORM F: MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS

(SIPDM)

The following particulars must be furnished in relation to tenders for municipalities and municipal entities where:

- a) Contractors are required; and
- b) goods, services or a combination thereof where the estimated total of the prices exceeds R 10 million including VAT.

In the case of a joint venture, separate municipal declarations and returnable documents shall be submitted in respect of each partner.

Section 1: Enterprise Details / Name of enterprise:

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Declaration for Contractor's services:

The enterprise has been awarded the following contract services by an organ of state during the last five years.

Name of organ of state	Estimated value of contracts	Nature of service e.g. quantity surveying	Service number similar to required service (yes / no)?

Attach separate page as necessary

Section 3: Goods, services or a combination thereof where the estimated total of the prices exceeds R 10 million including VAT

I / we certify that

1) (tick one of the boxes):

- the enterprise is not required by law to prepare annual financial statements for auditing.
- the enterprise is required by law to have audited annual financial statements and attached the audited financial statements for the past three financial years, or since the establishment as the enterprise was established within the past three years.

2) the enterprise and its directors has / have no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days (i.e.: all municipal accounts are paid up to date) Attach Municipal Utility Account;

3) source of goods and / or services:

(tick one of the boxes and insert percentages if applicable):

- goods and / or services are sourced only from within the Republic of South Africa
- % of the total cost of goods and / or services will be sourced from outside the Republic of South Africa and the percentage of payment from the municipality or municipal entity which is expected to be transferred out of the Republic is %

I furthermore confirm that the following contracts were awarded to the enterprise by an organ of state during the last five years and attached particulars of any material non-compliance or dispute concerning the execution of such contracts:

Name of organ of state	Estimated number of contracts	Nature of contracts

*Attach separate page as necessary

I, the undersigned who warrants that I am duly authorised on behalf of the tendering entity, hereby declare that the contents of this Declaration are within my personal knowledge, and save where stated otherwise are to the best of my belief both true and correct.

Signed: _____

Date: _____

Name: _____

Position: _____

ATTACHED HERETO AN ORIGINAL OR CERTIFIED COPY OF THE LATEST MUNICIPAL UTILITY ACCOUNT (NOT OLDER THAN THREE (3) MONTHS)

FORM G: CERTIFICATE OF INDEPENDENT TENDER (MBD 9)
--

Notes to tenderer:

- a) This certificate conforms to Treasury Regulation 16A9 and the requirement of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, that prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms if it is between parties in a horizontal relationship and if it involves collusive tendering.
- b) Collusive tendering is a conspiracy between businesses that would normally be expected to compete, to agree not to compete, in a tender process.
- c) This certificate serves as a declaration by the tenderer that the tender submitted is free from any collusion with a competitor.

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying tender:

(Tender Number and Description) in response to the invitation for the tender made by:

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of: _____ that:

(Name of Tenderer)

- i) I have read and I understand the contents of this Certificate;
- ii) I understand that the accompanying tender will be disqualified if this Certificate is found not to be true and complete in every respect;
- iii) I am authorized by the tenderer to sign this Certificate, and to submit the accompanying tender, on behalf of the tenderer;
- iv) Each person whose signature appears on the accompanying tender has been authorized by the tenderer to determine the terms of, and to sign, the tender, on behalf of the tenderer;
- v) For the purposes of this Certificate and the accompanying tender, I understand that the word "competitor" shall include any individual or organization, other than the tenderer, whether or not affiliated with the tenderer, who:
 - (a) has been requested to submit a tender in response to this tender invitation;
 - (b) could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer
- vi) The tenderer has arrived at the accompanying tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.

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

Signature

Date

Capacity under which Tender is Signed

Name of Tenderer

FORM H: DECLARATION OF GOOD STANDING REGARDING TAX (GBD 2)**ATTACH VALID TAX COMPLIANCE STATUS (TCS)**

The Tax Compliance Status (TCS) must be submitted together with the tender. Failure to submit the above-mentioned documentation will result in the invalidation of the tender.

In tenders where Consortia / Joint Ventures / Sub contractors are involved, each party must submit a separate Tax Compliance Status (TCS) PIN.

**FORM I: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN
MANAGEMENT PRACTICES (MBD 8)**

Notes to tenderer:

1. This tender document must form part of all tenders invited.
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 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 system;
 - c. failed to perform on any previous contract.
4. In order to give effect to the above, the following questionnaire must be completed and submitted with this tender.

Item	Question	Yes	No
4.1	<p>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?</p> <p>(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 <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the tenderer or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?</p> <p>for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		

4.4	Does the tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the tenderer and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

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

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

Signature

Date

Capacity under which Tender is Signed

Name of Tenderer

FORM J: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE

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). In the case of a Joint Venture, a printed copy of the Active Supplier Listing must be provided for each member of the Joint Venture.

Name of Contractor:

.....

Central Supplier Database Supplier Number:

.....

***Affix Proof of the National Treasury Central Supplier Database to this page
(Full CSD required, not summary)***

FORM K: DECLARATION OF TENDERER'S LITIGATION HISTORY

Does the tenderer have any litigation with which tenderer (including its directors, shareholders or other senior members in previous companies) have been involved with any organ of state or state department within the last ten years?

YES	NO
-----	----

If yes, furnish your details in table below.

NB: It is compulsory for all bidders to sign this form

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

Signature

Date

Capacity under which Tender is Signed

Name of Tenderer

FORM L: AUTHORITY OF SIGNATORY

Details of person responsible for tender process:

Name:

Contact number:

Office address:

.....

Signatories for close corporations and companies shall confirm their authority by attaching to this form **a duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be.

PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:

"By resolution of the board of directors passed on *(date)*

Mr.....

has been duly authorized to sign all documents in connection with the Tender for Contract Number/Name

.....and any Contract which may arise there from on behalf of

.....

(BLOCK CAPITALS) SIGNED ON BEHALF OF THE COMPANY

IN HIS CAPACITY AS

DATE

FULL NAMES OF SIGNATORY

SIGNATURE

AS WITNESSES: 1. NAME SIGNATURE

2. NAME SIGNATURE

PRO-FORMA FOR JOINT VENTURES:

Certificate of Authority for Joint Ventures

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

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature: Name: Designation:

**ATTACHED HERETO THE DULY SIGNED AND DATED ORIGINAL OR CERTIFIED
COPY OF AUTHORITY OF SIGNATORY ON COMPANY LETTERHEAD**

FORM M: SCHEDULE OF SPECIALIST SUBCONTRACTORS

Notes to tenderer:

1. The tenderer shall list below the specialist items of work on this contract. Alternatives may be mentioned.
2. The tenderer shall state whether he intends to carry out any specialised work himself.

Acceptance of this tender shall not be construed as approval of all or any of the listed specialist Sub contractors. Should any or all of the specialist Sub contractors not be approved subsequent to the acceptance of the tender, it shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a Sub contractor not listed below being approved by the Engineer.

SPECIALISED ITEM	INDICATE IF SUB-CONTRACTED (Tick correct option)	
	YES	NO

In order to complete the Works under this Contract, I/we propose to employ the following Sub contractors to carry out the portion/type of work as detailed. **Affix Original or Certified proof of 3 previous projects for each sub-Contractor.**

(Note: All proposed Sub contractors must be listed).

Sub-Contractor: Name, Address and Telephone No.	Portion/type of work to be undertaken	
_____ _____ () _____		Previous value of work:
		Previous Experience:
_____ _____ () _____		Previous value of work:
		Previous Experience:

_____ _____ () _____		Previous value of work:
		Previous Experience:
_____ _____ () _____		Previous value of work:
		Previous Experience:

FORM N: PROOF OF GOOD STANDING WITH COMPENSATION COMMISSIONER

Notes to tenderer:

1. Discovery that the tenderer has failed to make proper disclosure may result in City of Mbombela 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 or with a licensed compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act 1993 (COID) (Act 130 of 1993).

Affix certified Proof of Good Standing with Compensation Commissioner to this page as per the required CIDB grading

FORM O: SCHEDULE OF CURRENT COMMITMENTS

Notes to tenderer:

- (a) The tenderer shall list below all contracts currently under construction or awarded and about to commence and tenders for which offers have been submitted but awards not yet made.
- (b) In the event of a joint venture enterprise, details of all the members of the joint venture shall similarly be attached to this form.
- (c) The lists must be restricted to not more than 5 contracts and 5 tenders. If a tenderer's actual commitments or potential commitments are greater than 5 each, those listed should be in descending order of expected final contract value or sum tendered.

Contracts Awarded				
Employer	Project	Expected Value of contract (Inclusive of VAT)	Durations (Months)	Expected Completion Date

Tenders not Yet Awarded				
Employer	Project	Tendered Amount (Inclusive of VAT)	Tendered Duration (Months)	Expected Commencement Date

Signature

Date

Capacity under which Tender is Signed

Name of Tenderer

FORM P: REGISTRATION WITH CIDB

The tenderer shall provide a printed copy of the Active Contractor's Listing off the CIDB website. (www.cidb.org.za). Tenderers whose CIDB registration expires within 21 days after close of tender should attach proof of their application for re-registration (refer to Tender Data Clause 4.1). In the case of a Joint Venture, a printed copy of the Active Contractor's Listing must be provided for each member of the Joint Venture.

Name of Contractor:

Contractor Grading Designation:

CIDB Contractor Registration Number:

Expiry Date:

RETURNABLES FOR QUALITY CRITERIA

FORM Q: COMPANY EXPERIENCE IN RELATION TO SCOPE OF WORKS

The Tenderer will receive a maximum of 50 points based on information provided in this schedule.

The following is a statement of work of similar (explicitly maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal) nature and size recently successfully executed by myself / ourselves:

- 1 Points will be given for projects completed of similar nature and size.
- 2 The tenderer scores **6 points** per project with a value of more than or equal to R3 million but less than R6 million, completed in the last 5 years.
- 3 The tenderer scores **8 points** per project with a value of more than or equal to R6 million but less than R10 million completed in the last 5 years.
- 4 The tenderer scores **10 points** per project with a value of more than R10 million completed in the last 5 years.
- 5 The tenderer may list and attach proof of 5 projects of explicitly maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal of similar size.
- 6 The maximum Quality points for each criterion are listed below.
- 7 Positive feedback from the Consulting Engineer from the designated / listed contact person will contribute toward points allocated for the attached certificates of completion.
- 8 Positive feedback from the Employer from the designated / listed contact person will contribute toward points allocated for the attached certificates of completion.
- 9 Points for completion certificates attached will be given for similar projects. Negative feedback will forfeit all points, meaning zero (0) points will be allocated for the attached certificates of completion.
- 10 Failure to submit all relevant information per project will result in the forfeiture of all points for that relevant project.
- 11 The experience of the Tenderer or joint venture partners in a consortium will be evaluated based on experience in similar projects or similar areas and conditions in relation to the scope of work required for this project.

Certified Appointment letter as well as Completion Certificate (signed by client and Engineer and Contractor) of Relevant Work (to be attached – zero points if both is not attached)	Consulting Engineer: Contact Person and Telephone Number	Employer: Contact Person and Telephone Number	Value of Work (inclusive of VAT)	Date Completed (Attach Certified Completion Certificate)
*Attach additional pages if more space is required		Total Points		

FORM R: PLANT & EQUIPMENT

The tenderer will receive a maximum of 15 points based on information provided in this schedule.

1. The following are lists of major items of relevant equipment that I / we presently own or lease and will have available for this contract or will acquire or hire for this contract if my / our tender is accepted.
2. The tenderer will receive Quality points for listing of plant available for this specific contract as follows:
 - Major plant for construction works if well identified and 100% is owned and available at the start of contract, maximum points will be as stated in allocated points if owned column.
 - Zero points will be allocated for hired plant as indicated in the Allocate points for hired plant column on the table below.
 - Points for the plant correctly identified and owned will be calculated according to the allocated points based on the quantities under the Quantity Required column.
3. Proof of ownership to be submitted. Certified copies of motor vehicle license (MVLX) or motor vehicle license and license disc (MVL1) or certificate of registration (RC1) or any valid document issued by the department of transport (where applicable**). Invoices for equipment that are not traveling on the road will be accepted as proof of ownership (where applicable*). The invoice must be in the name of the bidding company or director(s).

Description, size, capacity, etc.	Allocate Points if owned	Quantity Required	Quantity owned	Quantity hired	Points Scored
Self-Power Sealing chip Spreader (20 ton)	2	1			
Water Tanker (8000 Litre or above)	1	1			
Smooth Drum Vibratory Roller (12 ton or above)	2	1			
Pneumatic Tyre Roller (12 ton or above)	2	1			
Tipper Truck	2	2			
Asphalt Paver	2	1			
Grader	2	1			
Road Marking Machine	1	1			
Milling Machine	1	1			
Total	15			0	
Total Points Allocated					

*Attached additional pages if more space is required.

FORM S: FINANCIAL RESOURCES BANKING INFORMATION
--

The tenderer will receive a maximum of 10 points based on information provided in this schedule.

The bank rating must be based on a value of R2 000 000.00

BANK RATING: C or Better = 10 points.

D and below = 0 points

Proof from a registered financial institution must be attached in order to claim points.

DETAILS OF TENDERER'S BANKING INFORMATION

Notes to tenderer:

- **The tenderer will be required to submit a bank guarantee after allocation of works prior execution.**
- In the event that the tenderer is a joint venture enterprise, the bank guarantee will be expected from the Lead Partner.

BANK NAME:												
ACCOUNT NAME: (e.g. ABC Civil Construction cc)												
ACCOUNT TYPE: (e.g. Savings, Cheque etc.)												
ACCOUNT NO:												
ADDRESS OF BANK:												
CONTACT PERSON:												
TEL. NO. OF BANK / CONTACT:												
How long has this account been in existence:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">0-6 months</td> <td style="width: 10%; text-align: center;"><input type="checkbox"/></td> <td rowspan="5" style="width: 30%; vertical-align: top;">(Tick which is appropriate)</td> </tr> <tr> <td>7-12 months</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>13-24 months</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>More than 24 months</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td> </td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	0-6 months	<input type="checkbox"/>	(Tick which is appropriate)	7-12 months	<input type="checkbox"/>	13-24 months	<input type="checkbox"/>	More than 24 months	<input type="checkbox"/>		<input type="checkbox"/>
0-6 months	<input type="checkbox"/>	(Tick which is appropriate)										
7-12 months	<input type="checkbox"/>											
13-24 months	<input type="checkbox"/>											
More than 24 months	<input type="checkbox"/>											
	<input type="checkbox"/>											

**FORM S: FINANCIAL RESOURCES DECLARATION OF PROCUREMENT
ABOVE R 10 MILLION (MBD5)**

For all procurement expected to exceed R10 million (all applicable taxes included), tenderer must complete the following questionnaire:

- Are you by law required to prepare annual financial statements for auditing?

YES / NO

- 1.1. If yes, submit audited financial statements for the past three years or since the date of establishment if established during the past three years.

.....

.....

2. Do you have any outstanding undisputed commitments for municipal services towards any municipal for more than three months or any other service provider in respect of which payments is overdue for more than 30 days?

YES / NO

.....

.....

- 2.1 If no, this serves to certify that the tenderer has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days?

.....

.....

- 2.2 If yes, please provide particulars

.....

.....

- 2.1 Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?

YES / NO

.....

.....

- a. If yes, furnish particulars

.....

.....

4.1 Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion of payment from the municipality / /municipal entity is expected to be transferred out of the Republic?

YES / NO

4.1 If yes, furnish particulars

.....
.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

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

I ACCEPT THAT THE STE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE

Signature

Date

Capacity under which Tender is
Signed

Name of Tenderer

FORM S: FINANCIAL RESOURCES
DOCUMENTATION OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE
NOT APPLICABLE – TO BE IMPLEMENTED AFTER CONTRACT AWARD

*The Tenderer must attach hereto an **Original Letter of Intent** from the financial institution with whom he has made the necessary arrangements, to the effect that the said financial institution will be prepared to provide the required performance guarantee when asked to do so. (Letter of Intent)*

A Pro forma follows herewith for the tenderer to use.

**PRO-FORMA FOR A PERFORMANCE
 GUARANTEE PERFORMANCE
 GUARANTEE**

Employer

(Name and Address)

Contract No

Contract Title

WHEREAS

(hereinafter referred to as “the Employer”) entered into, a Contract with:

(hereinafter called “the Contractor”)

on the _____ day of _____ 20_ for the construction of (Contract Title)

at

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of a guarantee for the due and faithful fulfilment of such Contract by the Contractor;

AND WHEREAS WE _____

(hereinafter referred to as the Guarantor) has/have at the request of the Contractor, agreed to give such guarantee;

NOW THEREFORE, WE do hereby guarantee and bind ourselves jointly and severally as Guarantor and Co-Principal Debtor to the Employer under renunciation of the benefits of division and exclusion for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

- 1) The Employer shall, without reference and/or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, directions or extension of the Completion Date of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor or liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the Completion Date which the Employer may make, give, concede or agree to under the said Contract.

- 2) This guarantee shall be limited to payment of a sum of money.

3) The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor.
 However, upon receipt by us of an authenticated copy of the Certificate of Completion in terms of the Contract, the amount of liability shall be reduced by 50% which shall be in force until the issue of the Final Approval Certificate at expiry of the Defects Liability Period.

This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of Completion.

4) His intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid of liquidated,

5) Our total liability hereunder shall not exceed the sum of:

(in words)

R _____ (in figures)

(10% of the tender sum) that amount I/we agree to hold at your disposal.

6) The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon the Guarantor's liability hereunder shall cease.

I/We declare that I/we, on behalf of the Guarantor, waive the legal exceptions available to a guarantor and undertake to pay the said amount or such portion thereof as may be demanded, immediately on receipt of a written demand from you.

A certificate under your hand shall be sufficient and satisfactory evidence as to the amount of the Guarantor's liability for the purpose of enabling provisional sentence or any similar relief to be obtained against the Guarantor.

This guarantee is neither negotiable nor transferable, and must be surrendered to the Guarantor in the event of the full amount of the Guarantee being paid to the Employer.

7) I/We hereby choose our address for the serving of all notices for all purposes arising here from as

IN WITNESS WHERE OF this guarantee has been executed by us at _____

on the _____ day of _____ 20____

As witness:

1. _____

Signature _____

2. _____

Signature _____

Duly authorized to sign on behalf of
 (Guarantor)

Address _____

FORM T: KEY PERSONNEL EXPERIENCE AND QUALIFICATIONS
--

The Tenderer will receive a maximum of 25 points based on information provided in this Schedule

Notes to tenderer:

1. The intention of this form is to demonstrate the tenderer's project structure, as well as the lines of responsibility between members of the project team and the overall company structure. Attach own organogram to this form.
2. Joint Venture tenderers require each element of the venture to submit separate organograms that show the individual structure of each member company and the lines of responsibility of the proposed personnel involved in the project. In addition, there must also be a combined organogram that indicates how the joint venture itself will function and the proposed share of the work will become a contractual obligation between the members of the joint venture.
3. State the city or town where the company's head office is located. The locality of regional or satellite offices, regardless of degree of autonomy or size is not required. Only submit the number of offices other than the head office. Do not count offices outside RSA.
4. Registered professional Engineers, technicians or technologists means those who are involved in the construction of roads and streets with related storm water structures. Registered professionals of other disciplines (e.g. mechanical) are considered as employees only.
5. For all foreign nationals the Tenderer must attach SAQA accreditation and certified proof of work permit.

CONSTRUCTION PERSONNEL

i) Contracts Manager (5 Points)

The Contracts Manager is required to have a minimum of NQF Level 7 in Civil Engineering or equivalent and a minimum of 10 years' experience in the maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal projects, as indicated below:

EXPERIENCE	10	11	12	13	14
POINTS	1	2	3	4	5

ii) Site Agent (10 Points)

The Site Agent is required to have a N.D in Civil Engineering; or equivalent to an NQF 6 qualification and a minimum of 10 years' experience in the maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal projects, as indicated below:

EXPERIENCE	10	11	12	13	14
POINTS	2	4	6	8	10

iii) Site Foreman (5 Points)

The Site Foreman on permanent/contract basis, with at least NQF 4 qualification or related qualification with experience in the maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal projects of not less than seven (7) years. Points will be allocated on a pro-rata basis for experience between 7 to 10 years, as indicated below:

EXPERIENCE	7	8	9	10
POINTS	2	3	4	5

iv) Safety Officer (5 Points)

The Safety officer on permanent/contract basis, with a valid certificate issued by SACPCMP and experience in the maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal projects of not less than three (3) years. Points will be allocated on a pro-rata basis for experience between 3 to 5 years, as indicated below:

EXPERIENCE	3	4	5
POINTS	2	3	5

Experience	Points
Provide detailed CVs and certified qualifications for all Key Personnel for each category stated above.	25

N.B Points to be allocated based on the relevant experience provided on the CVs provided. The appointed Contractor is to provide such personnel as attached or one with equivalent qualifications and experience. Failure to do so will result in termination of the contract.

ATTACH CV'S AND CERTIFIED QUALIFICATIONS OF KEY PERSONNEL TO THIS PAGE

Note: Only CV's and Certified Qualifications of Key personnel that were named and shown on the organogram to be attached.

COMPETENCE ACHIEVEMENT SCHEDULE (QUALITY)

		MAXIMUM POINTS TO BE ALLOCATED	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
Company Experience:	Form Q	50		
Plant and Equipment:	Form R	15		
Financial References:	Form S	10		
Key Personnel:	Form T	25		
	Sub- Total	100		
	TOTAL	100		

Note:

Total allocated for Quality is 100 points. The minimum threshold required to qualify for the next stage of evaluation is **70 points**. Only those tenders that achieve the minimum threshold will proceed to the price and preference evaluation stage.

SUPPLY CHAIN POLICY USING 80/20 PREFERENCE POINT SYSTEM

	MAXIMUM POINTS TO BE ALLOCATED
Price	80
Specific Goals	20
TOTAL	100

FORM U: SCHEDULE OF TENDER COMPLIANCE
--

Note to tenderer:

This Table 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.

FORM NO / GBD NO	FORM DESCRIPTION	TICK IF COMPLETED
A	CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING	
B	RECORD OF ADDENDA TO TENDER DOCUMENTS	
C	PROPOSED AMENDMENTS AND QUALIFICATIONS	
D	PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022	
E	COMPULSORY DECLARATION	
F	MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS	
G	CERTIFICATE OF INDEPENDENT TENDER	
H	DECLARATION OF GOOD STANDING REGARDING TAX	
I	DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES	
J	REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE	
K	DECLARATION OF TENDERER'S LITIGATION HISTORY	
L	AUTHORITY OF SIGNATORY	
M	SCHEDULE OF SPECIALIST SUBCONTRACTORS	
N	PROOF OF GOOD STANDING WITH COMPENSATION COMMISSIONER	
O	SCHEDULE OF CURRENT COMMITMENTS	
P	REGISTRATION WITH CIDB	
Q	COMPANY EXPERIENCE IN RELATION TO SCOPE OF WORKS	
R	PLANT & EQUIPMENT	
S	FINANCIAL RESOURCES	
T	KEY PERSONNEL EXPERIENCE AND QUALIFICATIONS	
U	SCHEDULE OF TENDER COMPLIANCE	

THE CONTRACT

PART C1 AGREEMENT AND CONTRACT DATA

PART C2 PRICING DATA

PART C3 SCOPE OF WORKS

PART C4 SITE INFORMATION

PART C1 AGREEMENT AND CONTRACT DATA

CONTENTS

C1.1 FORM OF OFFER

C1.2 FORM OF ACCEPTANCE

C1.3 SCHEDULE OF DEVIATIONS

C1.4 CONTRACT DATA

C1.5 PERFORMANCE GUARANTEE

C1.6 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

C1.7 CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

C1.1 **FORM OF OFFER**

C1.2 **FORM OF ACCEPTANCE**

C1.3 **SCHEDULE OF DEVIATIONS**

C1.4 **CONTRACT DATA**

C 1.1: FORM OF OFFER

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of a **PANEL OF CONTRACTORS FOR THE MAINTENANCE OF ROADS AND STORMWATER, MINOR REHABILITATION, PATCHWORK, RESEAL AND GENERAL MAINTENANCE FOR THE CITY OF MBOMBELA, ON AN AS AND WHEN REQUIRED BASIS: THREE (3) YEAR TERM**

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the tender returnables and, by submitting this offer, has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the Contractor under the contract, including compliance with all its terms and conditions according to their true intent and meaning, for an amount to be determined in accordance with the conditions of contract identified in the contract data.

The offered total of the prices, inclusive of any value added tax or sales tax which the law requires the

Employer to pay, is _____
_____ (in words) R _____ (in figures)

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the Contractor in terms of the conditions of the contract identified in the contract data.

for the TENDERER

Signature: _____

Name: _____

Capacity: _____

Witness:

Name: _____

Signature: _____

Date: _____

C1.2: FORM of ACCEPTANCE

ACCEPTANCE

By signing this part of this form of offer and acceptance, the Employer identified below accepts the tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract, that is the subject of this agreement.

The terms of the contract, are contained in:

Part C 1: Agreements and contract data, (which includes this agreement)

Part C 2: Pricing data

Part C 3: Scope of work.

Part C 4: Site information

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

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules, as well as any changes to the terms of the offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Employer's agent (whose details are given in the contract data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

for the EMPLOYER

Signature: _____

Date: _____

Name: _____

Capacity: _____

Witness:

Name: _____

Signature: _____

Date: _____

C1.3: SCHEDULE of DEVIATIONS

1 Subject
Details
2 Subject
Details
3 Subject
Details
4 Subject
Details

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

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

for the TENDERER

Name: _____

Signature: _____

Date: _____

Capacity: _____

for the EMPLOYER

Name: _____

Signature: _____

Date: _____

Capacity: _____

Witness:

Name: _____

Signature: _____

Date: _____

C1.4: CONTRACT DATA

CONDITIONS OF CONTRACT**PART 1: DATA PROVIDED BY THE EMPLOYER****CONDITIONS OF CONTRACT**

The General Conditions of Contract for Construction Works, Third Edition, 2015, published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685, are applicable to this contract and is obtainable from www.saice.org.za.

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third Edition, 2015, are applicable to this Contract.

PART 1: DATA PROVIDED BY THE EMPLOYER

The following contract specific data is applicable to this Contract:

Clause	Description														
1.1.1.13	The Defects Liability Period is 6 months														
1.1.1.15	The Name of the Employer is the City of Mbombela .														
1.1.1.16	The Name of the Employer's Agent is Shuma Africa (Pty) Ltd.														
1.1.1.26	The pricing strategy: Re-Measurement Contract														
1.2.1.2	<p>The Employer's address for receipt of communications is:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Physical address:</td> <td style="width: 50%;">Postal address:</td> </tr> <tr> <td>1 Nel Street</td> <td>PO Box 45</td> </tr> <tr> <td>MBOMBELA</td> <td>MBOMBELA</td> </tr> <tr> <td>1200</td> <td>1200</td> </tr> <tr> <td>Telephone: 013 759 9319</td> <td></td> </tr> <tr> <td>Fax: 013 759 2070</td> <td></td> </tr> <tr> <td>E-mail: Benedict.Mabunda@mbombela.gov.za</td> <td></td> </tr> </table>	Physical address:	Postal address:	1 Nel Street	PO Box 45	MBOMBELA	MBOMBELA	1200	1200	Telephone: 013 759 9319		Fax: 013 759 2070		E-mail: Benedict.Mabunda@mbombela.gov.za	
Physical address:	Postal address:														
1 Nel Street	PO Box 45														
MBOMBELA	MBOMBELA														
1200	1200														
Telephone: 013 759 9319															
Fax: 013 759 2070															
E-mail: Benedict.Mabunda@mbombela.gov.za															
1.2.1.2	<p>The address of the Employer's Agent is:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Physical address:</td> <td style="width: 50%;">Postal address:</td> </tr> <tr> <td>Unit 75, Building 11</td> <td>P O Box 1644</td> </tr> <tr> <td>Sonpark Shopping Centre</td> <td>Nelspruit</td> </tr> <tr> <td>Cnr Madiba Drive & Piet Retief Street</td> <td>1200</td> </tr> <tr> <td>Mbombela, 1200</td> <td></td> </tr> <tr> <td>Telephone: 013 752 3658</td> <td></td> </tr> <tr> <td>E-mail: info@shumafrica.co.za</td> <td></td> </tr> </table>	Physical address:	Postal address:	Unit 75, Building 11	P O Box 1644	Sonpark Shopping Centre	Nelspruit	Cnr Madiba Drive & Piet Retief Street	1200	Mbombela, 1200		Telephone: 013 752 3658		E-mail: info@shumafrica.co.za	
Physical address:	Postal address:														
Unit 75, Building 11	P O Box 1644														
Sonpark Shopping Centre	Nelspruit														
Cnr Madiba Drive & Piet Retief Street	1200														
Mbombela, 1200															
Telephone: 013 752 3658															
E-mail: info@shumafrica.co.za															
2.4	<p>Variations to the Conditions of Contract are:</p> <p>Add the following at the end of sub clause 2.4.1:</p> <p>" The several documents forming the Contract shall rank in the following order of precedence:</p> <ol style="list-style-type: none"> 1. Contract Agreement, 2. Form of Offer and Acceptance, 														

Clause	Description
	<p>3. Contract Data, 4. Specification Data, 5. Standardized Specifications, 6. Drawings, 7. Bill of Quantities, 8. Statutory Regulations, 9. Other standard specifications.</p> <p>If the contents of any part of the documents contradict any other part, the document in the highest position on the above order of precedence shall have preference and apply.”</p>
4.3.3	<p>Add the following at the end of sub clause 4.3.2:</p> <p>"4.3.3 The Employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993), hereinafter referred to as 'the Act', that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act:</p> <ul style="list-style-type: none"> (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act. (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with. (iii) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations. (iv) The Contractor agrees that any duly authorized officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor. (v) The Contractor shall be obliged to report forthwith to the Employer and Employer's Agent any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Employer's Agent, of such investigation, complaint or criminal charge. <p>The Contractor shall furthermore, in compliance with Construction Regulations 2003 to the Act:</p> <ul style="list-style-type: none"> (vi) Acquaint himself with the requirements of the Employer's health and safety specification as laid down in regulation 5(1) of the Construction Regulation 2014, and prepare a suitably and sufficiently documented health and safety plan as contemplated in regulation 6(1) of the Construction Regulation 2014 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment shall be submitted to the Employer for approval within seven (7) days after acceptance of the bid, and shall be implemented and maintained from the Commencement of the Works.

Clause	Description
	<p>(vii) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2003, to ensure that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Employer's Agent, at the request of the Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified."</p> <p>(viii) Acquaint himself with the requirements of COVID-19 OCCUPATIONAL HEALTH AND SAFETY MEASURES IN WORKPLACES COVID-19 (C19 OHS), 2020, and prepare a suitably and sufficiently documented COVID-19 health and safety plan as contemplated in COVID-19 (C19 OHS), 2020 for approval by the Employer or his assigned agent. The Contractor's health and safety plan and risk assessment which includes the COVID-19 safety plan shall be submitted to the Employer for approval within seven (7) days after acceptance of the bid. The COVID-19 safety plan shall be implemented and maintained from the Commencement of the Works for as long as the declaration of a national disaster published in <i>Government Gazette</i> 43096 on 15 March 2020 remains in force.</p> <p>The Employer and Contractor agree that the Contractor will comply with the provisions of "The Mine Health and Safety Act, (Act 29 Of 1996) as amended by the Mine Health and Safety Amendment Act (Act 72 of 1997).</p> <p>The following arrangements and procedures will apply:</p> <ul style="list-style-type: none"> (i) The Contractor shall himself obtain the Mining Authorization for the sites. (ii) The Contractor shall assume responsibility for the Environmental Management Programs (EMP) in respect of the sites and shall ensure that the sites are rehabilitated at the conclusion of the Contract. (iii) The Contractor shall comply with the provisions of the Act and the requirements of the Director: Mineral Development of the Department of Minerals and Energy in making the necessary financial provisions to mine optimally and safety and to rehabilitate the surface of the land concerned satisfactory and to carry out the EMP. All costs incurred in providing a guarantee or other financial provision shall be borne by the Contract. (iv) This Agreement shall hold good from the date on which the Mining Authorization is issued until the date on which a Closure Certificate is issued in terms of the Minerals Act, 1991. (v) Nothing in this Agreement shall exonerate the Contractor from compliance with any requirements of the Employer's Agent regarding the rehabilitation of sites prior to the issue of a Final Approval Certificate in terms of clause 5.16.2 of the General Conditions of Contract (2010). (vi) The Contractor shall undertake all the duties and accept all the responsibilities of the owner in compliance with the requirements of the Act as amended. (vii) The Contractor accepts responsibility for compliance with the Act, as amended, including all his Sub contractors whether or not selected and/or approved by the Employer.
5.3.1	<p>The documentation required before commencement with Works execution are:</p> <ul style="list-style-type: none"> • Health and Safety Plan (refer to clause 4.3.1) • Initial programme (Refer to clause 5.6.1) • Security (Refer to clause 6.2.1) • Insurance (Refer to Clause 8.6.1)
5.3.2	<p>The time to submit the documentation required, before commencement with Works execution is 14 calendar days.</p>
5.4.2	<p>The access and possession of site shall not be exclusive to the Contractor.</p>

Clause	Description
5.8.1	The non-working days are public holidays and Sundays. The special non-working days are: The year-end break from 13-Dec-2024 to 03-Jan-2025, 19 December 2025 to 02 January 2026, 17 December 2026 to 07 January 2027 OR AS PER SAFCEC To Be Announced.
5.13.1	The penalty for failing to complete the Works is: is 0.05 % of the Total Tender Sum per Calendar Day
5.14.1	Practical completion is reached when: The completed roads can be opened to traffic for use.
5.16.3	The latent defect period is 10 years after date of completion
6.5.1.2.3	The percentage allowances to cover all charges for the Contractor's and Sub Contractor's profits, timekeeping, clerical work, insurance, establishment, superintendence and the use of hand tools is 15% .
6.8.2	This contract does include contract price adjustment
6.8.3	Price adjustments for variations in the costs of special materials are not allowed.
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%
6.10.3	The limit of retention money is 10%
8.6.1.1.2	Not required.
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum will be calculated at 12% of the claim value.
8.6.1.2	A coupon policy for Special Risks Insurance issued by the South African Special Risks Insurances Association is required.
8.6.1.3	The limit of indemnity for liability insurance is <u>R 5 000 000.00</u> for any single liability claim
10.5.2	Dispute resolution shall be ad-hoc adjudication.
10.5.3	The number of Adjudication Board Members to be appointed is one .
10.7.1	The determination of disputes shall be by arbitration .
Special Clause	The Contractor's CIDB grading must remain active at the same or higher level as at time of appointment, should the grading be suspended, downgraded and or expire the Contractor will only be allowed 21 days to remedy such and failure could result in termination of the Contract.
	Thirty percent (30%) of the contract value shall be made non-compulsory for subcontracting to local people/companies (CoM) irrespective of the <u>domicilium et exicutandi</u> of the Contractor. However Contractors will be allocated points for the proposal of social responsibility/social development plan (Form D of returnables) within CITY OF MBOMBELA

PART 2: DATA PROVIDED BY THE CONTRACTOR

The Contractor is advised to read the *General Conditions of Contract for Construction Works*, Third Edition (2015) published by the South African Institution of Civil Engineering, in order to understand the implications of this Data which is required to be completed.

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

Clause	Description						
1.1.1.9	The Contractor is						
1.2.1.2	The Contractor's address for receipt of communications is: Physical address: Postal address: Telephone: Fax: E-mail:						
1.1.1.14	The time for achieving Practical Completion of the whole of the Works is..... weeks after Commencement Date (site handover).						
6.2.1	The security to be provided by the Contractor shall be one of the following <table border="1"> <thead> <tr> <th>Type of Security</th> <th>Contractor to choose: Indicate " Yes" or " No"</th> </tr> </thead> <tbody> <tr> <td>Cash deposit of 10% of the contract sum</td> <td></td> </tr> <tr> <td>Performance guarantee of 10% of the contract sum</td> <td></td> </tr> </tbody> </table>	Type of Security	Contractor to choose: Indicate " Yes" or " No"	Cash deposit of 10% of the contract sum		Performance guarantee of 10% of the contract sum	
Type of Security	Contractor to choose: Indicate " Yes" or " No"						
Cash deposit of 10% of the contract sum							
Performance guarantee of 10% of the contract sum							

C1.5 FORM OF GUARANTEE

PRO FORMA PERFORMANCE

GUARANTEE

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Employer's Agent" means:

"Works" means:

"Site" means:

"Contract" means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

"Contract Sum" means: The accepted amount inclusive of tax of R

Amount in words:

"Guaranteed Sum" means: The maximum aggregate amount of R

Amount in words.....

"Expiry Date" means.....

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Works as defined in the Contract.

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Employer's Agent of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;

- 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
- 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
 - 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
 - 5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
 - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
14. Where this Performance Guarantee is issued in the Republic of South Africa, the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

C1.6 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(ACT NO 85 OF 1993)

AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

THIS AGREEMENT made at

on this the day of in the year

between CITY OF MBOMBELA (hereinafter called "the Employer") of the one part, herein represented by

in his capacity as

and

(hereinafter called "the Mandatory") of the other part, herein represented by

.....

in his capacity as

WHEREAS the Employer is desirous that certain works be executed, viz The appointment of panel of contractors for the maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal within the City of Mbombela, on an as and when required basis: three (3) year term and has accepted a Tender by the Mandatory for the completion of such Works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1 The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this Contract.
- 2 This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or Employer’s Agent requiring him to commence the execution of the Works, to either
 - (a) the date of the Final Approval Certificate issued in terms of Clause 52.1 of the General Conditions of Contract (hereinafter referred to as "the GCC") or
 - (b) the date of termination of the Contract in terms of Clauses 54, 55 or 56 of the GCC.
- 3 The Mandatory declares himself to be conversant with the following:
 - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:
 - (i) Section 8 : General duties of Employers to their employees;
 - (ii) Section 9 : General duties of Employers and self-employed persons to persons other than employees;
 - (iii) Section 37 : Acts or omissions by employees or Mandatory, and
 - (iv) Subsection 37(2) relating to the purpose and meaning of this Agreement.
 - (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his Sub contractors.
 - (c) **All the requirements, regulations and standards of the COVID-19 Occupational Health and Safety Measures in Workplaces, COVID-19 (C19 OHS), 2020.**
- 4 In addition to the requirements of Clause 33 of the GCC and all relevant requirements of the above-mentioned Volume 3, the Mandatory agrees to execute all the Works forming part of this Contract and to operate and utilise all machinery, plant and equipment in accordance with the Act.

5 The Mandatory is responsible for the compliance with the Act by all his Sub contractors, whether or not selected and/or approved by the Employer.

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

6 The Mandatory undertakes to ensure that he and/or Sub contractors and/or their respective Employers will at all times comply with the following conditions:

- (a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
- (b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
- (c) The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatory and/or his employees and/or his Sub contractors.

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:

WITNESS 1. _____
(Name in capitals)

Signature

WITNESS 2. _____
(Name in capitals)

Signature

SIGNED FOR AND ON BEHALF OF THE MANDATORY:

WITNESS 1. _____
(Name in capitals)

Signature

WITNESS 2. _____
(Name in capitals)

Signature

C1.7 CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

The signatory for the company that is the Contractor in terms of the above-mentioned Contract and the Mandatory in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the Board of Directors.

An example is given below:

"By resolution of the Board of Directors passed at a meeting held on _____ 20 _____
_____,"

Mr/Ms _____ whose signature appears below, has been duly authorised to sign the AGREEMENT in terms of THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 of 1993) on behalf of:

SIGNED ON BEHALF OF THE COMPANY: _____

IN HIS CAPACITY AS: _____

DATE: _____

SIGNATURE OF SIGNATORY: _____

WITNESS: 1. _____ 2. _____

NAME (in capitals): 1. _____ 2. _____

PART C2 PRICING DATA

C2.1 PRICING INSTRUCTIONS

C2.1: PRICING INSTRUCTIONS

1 The Tender Data, the Contract Data, the Scope of Work, the Site Information and the Drawings shall be read in conjunction with the Schedule of Quantities.

2 The Schedule comprises items covering the Contractor's profit and costs of general liabilities and of the construction of Temporary and Permanent Works.

Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Schedule, he should note the fact that the Contractor is entitled, under various circumstances, to payment for additional work carried out and that the Employer's Agent is obliged to base his assessment of the rates to be paid for such additional work on the rates the Contractor inserted in the Schedule.

The measurement and payment clauses of each Specification, read together with the relevant clauses of the Specification Data, all set out which ancillary or associated activities are included in the rates for the specified operations.

3 Descriptions in the Schedule of Quantities are abbreviated and may differ from those in the Standardized and Specification Data. No consideration will be given to any claim by the Contractor submitted on such a basis. The Schedule has been drawn up generally in accordance with the latest issue of Civil Engineering Quantities¹. Should any requirement of the measurement and payment clause of the appropriate Standardized or Specification Data be contrary to the terms of the Schedule or, when relevant, to the Civil Engineering Quantities, the requirement of the appropriate Standardized Specification or Specification Data as the case may be, shall prevail.

4 Unless stated to the contrary, items are measured and paid for net, in accordance with the Drawings, without any allowance having been made for waste.

5 The amounts and rates to be inserted in the Schedule of Quantities shall be the full inclusive amounts to the Employer for the work described under the several items. Such amounts shall cover all the costs and expenses that may be required in and for the construction of the work described, and shall cover the costs of all general risks, profits, taxes (but excluding value-added tax), liabilities and obligations set forth or implied in the documents on which the Tender is based.

6 An amount or rate shall be entered against each item in the Schedule of Quantities, whether or not quantities are stated. An item against which no amount or rate is entered will be considered to be covered by the other amounts or rates in the Schedule.

The Tenderer shall also fill in a rate against the items where the words "rate only" appears in the amount column. Although no work is foreseen under these items and no quantities are consequently given in the quantity column, the tender rates shall apply should work under these items actually be required.

Should the Tenderer group a number of items together and tender one sum for such group of items, the single tender sum shall apply to that group of items pro rata and not to each individual item, or should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed to be nil.

The tender rates, prices and sums shall, subject only to the provisions of the General Conditions of Contract, remain valid irrespective of any change in the quantities during the execution of the Contract.

7 The quantities of work as measured and accepted and certified for payment in accordance with the General Conditions of Contract, and not the quantities stated in the Schedule of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by any differences between the quantities in the Schedule of Quantities and the quantities certified for payment.

The ordering of materials shall not be based on the quantities in the Schedule of Quantities. Materials ordered from the Schedule of Quantities without prior confirmation by the Employer's Agent shall be at the risk of the Contractor. No compensation shall be paid for materials ordered erroneously and all costs shall be borne by the Contractor.

¹ The standard system of measurement of civil Engineering quantities published by the South African Institution of Civil Engineers.

- 8 The quantities of work as measured and accepted and certified for payment in accordance with the General Conditions of Contract, and not the quantities stated in the Schedule of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by any differences between the quantities in the Schedule of Quantities and the quantities certified for payment.

The ordering of materials shall not be based on the quantities in the Schedule of Quantities. Materials ordered from the Schedule of Quantities without prior confirmation by the Employer's Agent shall be at the risk of the Contractor. No compensation shall be paid for materials ordered erroneously and all costs shall be borne by the Contractor.

- 9 For the purposes of this Schedule of Quantities, 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 COLTO Standardized Specification for Road and Bridge Works for State Authorities (1998 edition) or the Specification Data.

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

Rate : The payment per unit of work at which the Tenderer tenders to do the work Amount : The quantity of an item multiplied by the tender rate of the (same) item Sum : An amount tender for an item, the extent of which is described in the Schedule of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units.

- 10 The units of measurement indicated in the Schedule of Quantities are metric units. The following abbreviations may appear in the Schedule of Quantities:

mm	=	millimetre
m	=	meter
km	=	kilometre
km-pass	=	kilometre-pass
m ²	=	square meter
m ² -pass	=	square meter-pass
ha	=	hectare
m ³	=	cubic meter
m ³ -km	=	cubic meter kilometre
kW	=	kilowatt
kN	=	kilo-Newton
kg	=	kilogram
l	=	litre
kl	=	kilolitre
MI	=	mega litre
t	=	ton (1 000 kg)
%	=	per cent
MN	=	mega-Newton
MN-m	=	mega-Newton-meter
PC Sum	=	Prime Cost Sum
Prov Sum	=	Provisional Sum
Sum	=	Lump Sum

C2.2 SCHEDULE OF QUANTITIES**N.B:**

- a. **THE quantities provided on the below bill (BOQ) ARE for the purpose of evaluation.**
- b. **RATES MUST BE PROVIDED by the contractor.**
- c. **If the bill is not fully completed, the contractor will be disqualified.**
- d. **The City will as and when required issue a purchase order based on the accepted rates for the value of not more than the threshold on not more than R2 000 000 per order.**
- e. **The amount to be reflected on the form of offer will only be used for evaluation purposes.**

C2.2: BILL OF QUANTITIES

SCHEDULE OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

SECTION 1300

Number	Item Description	Unit	Quantity	Rate	Amount
					R
13.00	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
B13.01	Contractor's general obligations				Percentage
	(a) Fixed obligations	%	Maximum of 15%		Rate Only
	(b) Value-related obligations	%			Rate Only
	(c) Time-related obligations	%			Rate Only
	(d) Health and safety obligation (including compliance with COVID-19 requirements, as per the specifications)	L/sum			
	(e) Monthly Safety Audit by the Client	PC sum	1.0	75000	75000
	(f) Handling costs and profit in respect of subitem B13.01(e) above	%	75,000.0		
Total Carried Forward To Summary					

SECTION 1500

Number	Item Description	Unit	Quantity	Rate	Amount
					R
15.00	ACCOMMODATION OF TRAFFIC				
15.01	Accommodating traffic and maintaining temporary deviations	km	1.0		
15.02	Earthworks for temporary deviations				
	(a) Shaping of temporary deviations	km	1.0		
	(b) Cut and borrow to fill	m ³	1.0		
	(c) Cut to spoil	m ³	1.0		
15.03	Temporary traffic-control facilities				
	(a) Flagmen	man-day	1.0		
	(b) Portable STOP and GO-RY signs	No	1.0		
	(c) Temporary traffic-control signals as specified or as shown on the drawings	No	1.0		
	(d) Amber flicker lights	No	1.0		
	(e) Road signs, R- and TR-series, (size indicated)	No	1.0		
	(f) Road signs, TW-series, (size indicated)	No	1.0		
	(g) Road signs, STW-, DTG-, TGS- AND TG-series (excluding delineators and barricades)	m ²	1.0		
	(h) Delineators (DTG50J) (size indicated):				
	(i) Single	No	1.0		
	(ii) Mounted back-to-back	No	1.0		
	(i) Moveable barricade/road sign combination (size indicated)	No	1.0		
	(j) Traffic cones (size indicated)	L/sum	1.0		
	(k) Single guardrails attached to posts	m	1.0		
	(l) Movable barriers (type indicated)	m	1.0		
	(m) Two-way communication devices	No	1.0		
15.04	Relocation of traffic-control facilities	L/sum	1.0		
Total Carried Forward To Summary					

SECTION M1500

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M1500	CRACK AND JOINT SEALING OF CONCRETE PAVEMENTS				
M150.01	Preparation and sealing or resealing of old joints and cracks in existing concrete pavements				
(a)	Expansion joints	m	1.0		
(b)	Construction joints and weakened plane joints				
(i)	(specify width)	m	1.0		
(ii)	(Etc. for other widths)	m	1.0		
(c)	Cracks				
(i)	(specify width)	m	1.0		
Total Carried Forward To Summary					

SECTION 1600

Number	Item Description	Unit	Quantity	Rate	Amount
					R
16.00	OVERHAUL				
B16.02	Overhaul on material hauled in excess of 5,0 km (ordinary overhaul)	m ³ -km	1.0		
Total Carried Forward To Summary					

SECTION 1700

Number	Item Description	Unit	Quantity	Rate	Amount
					R
17.00	CLEARING AND GRUBBING				
17.05	Cleaning out of hydraulic structures				
	(a) Pipes with an internal diameter up to and including 750 mm	m ³	1.0		
	(b) Pipes with an internal diameter exceeding 750 mm	m ³	1.0		
	(c) Box culverts up to and including 1,5 m vertical dimension	m ³	1.0		
	(d) Box culverts exceeding 1,5 m vertical dimension	m ³	1.0		
B17.07	Clearing and cleaning of existing surfaced roads				
	(a) Manual labour (6 man team) plus tools	h	1.0		
	(b) 6 m3 Tipper truck	h	1.0		
B17.08	Dump site charges for spoil of all excavated material at a suitable dump site identified by the contractor.	m ³	1.0		
B17.09	Pruning of roadside branches to accommodate equipment and plant:				
	(a) Tree pruning & removal of cuttings as generated by team and truck	day	1.0		
Total Carried Forward To Summary					

SECTION M1700

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M1700	REPAIR OF SLOPE FAILURES AND WASHAWAYS				
M170.01	Reconstruction of slope failures and washaways - mass earthworks				
(a)	Excavation and removing excavated material to spoil or stockpile				
(i)	Soft material	m ³	1.0		
(ii)	Intermediate material	m ³	1.0		
(iii)	Hard and boulder class material	m ³	1.0		
(b)	Drying excavated material suitable for re-use	m ³	1.0		
(c)	Roadbed compaction to 90% of modified AASHTO density	m ³	1.0		
(d)	Backfill at excavated area				
(i)	Fill embankments to 93% of modified AASHTO density	m ³	1.0		
(ii)	Cut embankments to 90% of modified AASHTO density	m ³	1.0		
M170.02	Reconstruction of pavement layers				
(a)	Natural gravel selected subgrade	m ³	1.0		
(b)	Cement stabilised natural gravel subbase	m ³	1.0		
(c)	Emulsion treated crushed stone base	m ³	1.0		
(d)	Hot mix asphalt	t	1.0		
(e)	Cold mix asphalt mixed on site	t	1.0		
(f)	Cold mix asphalt from commercial sources	t	1.0		
M170.03	Tack coat				
(a)	30% stable-grade emulsion	m ²	1.0		
M170.04	Overhaul on material hauled in excess of 1,0 km	m ³ -km	1.0		
Total Carried Forward To Summary					

SECTION M9100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M9100	DAYWORKS SCHEDULE				
M910.01	Labour during normal working hours				
(a)	Unskilled	h	1.0		
(b)	Semi-skilled	h	1.0		
(c)	Skilled	h	1.0		
(d)	Ganger	h	1.0		
(e)	Flagmen	h	1.0		
M910.02	Labour outside normal working hours				
(a)	Outside normal working hours and Saturdays				
(i)	Unskilled	h	1.0		
(ii)	Semi-skilled	h	1.0		
(iii)	Skilled	h	1.0		
(iv)	Ganger	h	1.0		
(v)	Flagmen	h	1.0		
(b)	Sundays and public holidays				
(i)	Unskilled	h	1.0		
(ii)	Semi-skilled	h	1.0		
(iii)	Skilled	h	1.0		
(iv)	Ganger	h	1.0		
(v)	Flagmen	h	1.0		
M910.03	Transport and equipment				
(a)	Tipper Trucks				
(i)	3 to 5 ton capacity	h	1.0		
(ii)	More than 5 ton capacity	h	1.0		
(b)	Loader (0,5 m3) bucket	h	1.0		
Total Carried Forward					

SECTION M9100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
Brought Forward					
(c)	Grader (CAT 140 G or similar)	h	1.0		
(d)	Compactor (Bomag BW 90)	h	1.0		
(e)	Water truck (5 000 litre)	h	1.0		
(f)	Mechanical broom	h	1.0		
(g)	Tractor-trailer combination (43 kW, 3 ton min.)	h	1.0		
(h)	Suitable truck/bus for transporting labourers	h	1.0		
(i)	Safety vehicle for pre-marking purposes	h	1.0		
Total Carried Forward To Summary					

SECTION 2100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
21.00	DRAINS				
21.01	Excavation for open drains:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m ³	1.0		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	1.0		
	(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m ³	1.0		
B21.03	Excavation for subsoil drainage systems:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m ³	1.0		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	1.0		
	(c) Extra over subitem B21.03(a) for excavation in hard material irre spective of depth	m ³	1.0		
21.04	Impermeable backfilling to subsoil drainage systems	m ³	1.0		
B21.06	Natural permeable material in subsoil drainage systems (crushed stone):				
	(b) Crushed stone obtained from commercial sources				
	(ii) Coarse-Grade (19mm)	m ³	1.0		
B21.07	Natural permeable material in subsoil drainage systems (sand):				
	(b) Sand from commercial sources	m ³	1.0		
21.08	Pipes in subsoil drainage systems:				
	(i) HDPE 110MM 6m, 60 - 75% perforated pipe, with straight couplings for sub-surface drainage.	m	1.0		
21.10	Geotextile: polyester non-woven, continues filament geotextile.				
	(i) Supply Geotextile with through flow of not less than 200 l/s/m ² , or equivalent	m ²	1.0		
B21.12	Concrete outlet structures, manhole boxes, junction boxes and cleaning eyes for subsoil drainage systems:				
	(a) Outlet structures	No	1.0		
	(c) Junction boxes	No	1.0		
	(d) Cleaning eyes	No	1.0		
21.14	Repairing or replacing existing drainage systems	m	1.0		
Total Carried Forward					

SECTION M2100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M2100	REPAIR AND MAINTENANCE OF INLET AND OUTLET STRUCTURES				
M210.01	Excavation	m ³	1.0		
M210.02	Backfilling				
(a)	Using the excavated material	m ³	1.0		
(b)	Using stabilised excavated material	m ³	1.0		
M210.03	Reconstruction of inlet and outlet structures				
(a)	Concrete (specify class)	m ³	1.0		
(b)	Brickwork	m ³	1.0		
(c)	Plastering	m ²	1.0		
M210.05	Demolition of existing structures				
(a)	Plain concrete	m ³	1.0		
(b)	Reinforced concrete	m ³	1.0		
(c)	Brickwork	m ³	1.0		
M210.06	Repairing of existing structures				
(a)	Concrete	m ³	1.0		
(b)	Bricks	m ³	1.0		
(ii)	Commercial sources	m ³	1.0		
(d)	Plastering	m ²	1.0		
M210.07	Steel reinforcement				
(a)	Mild steel bars	t	1.0		
(b)	High tensile steel bars	t	1.0		
(c)	Welded steel mesh	kg	1.0		
Total Carried Forward To Summary					

SECTION 2200

Number	Item Description	Unit	Quantity	Rate	Amount
					R
22.00	PREFABRICATED CULVERTS				
22.01	Excavation				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1.5 m	m ³	1.0		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	1.0		
	(b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m ³	1.0		
22.02	Backfilling:				
	(a) Using the excavated material	m ³	1.0		
	(b) Using imported selected material	m ³	1.0		
	(c) Extra over subitems 22.02(a) and (b) for soil cement backfilling				
	(i) with 3% Cement	m ³	1.0		
22.03	Concrete pipe culverts:				
	(a) On class A bedding:450mm dia	m	1.0		
	(b) On class B bedding:450mm diameter	m	1.0		
	(c) On class A bedding:750mm dia	m	1.0		
	(d) On class B bedding:750mm dia	m	1.0		
	(e) On class A bedding:900mm dia	m	1.0		
	(f) On class B bedding: 900mm dia	m	1.0		
	(g) On class A bedding:900mm dia	m	1.0		
	(h) On class B bedding: 900mm dia	m	1.0		
	(i) On class B bedding: 1200mm dia	m	1.0		
22.05	Portal and rectangular culverts:				
	(a) Complete with prefabricated floor slabs				
	(i) 1200 mm x 1200 mm	m	1.0		
	(ii) 1500 mm x 1500 mm	m	1.0		
Total Carried Forward					

SECTION 2200

Number	Item Description	Unit	Quantity	Rate	Amount
					R
Brought Forward					
22.07	Cast in situ concrete and formwork				
	(a) In class A bedding, screeds and the encasing for pipes, including formwork				
	(1) Class 15/38	m ³	1.0		
	(2) Class 30/19	m ³	1.0		
	(3) Class 30/38	m ³	1.0		
	(b) In floor slabs for portal or rectangular culverts, including formwork and class U2 surface finish				
	(1) Class 30/19	m ³	1.0		
	(2) Class 30/38	m ³	1.0		
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork but including class U2 surface finish				
	(1) Class 30/19	m ³	1.0		
	(2) Class 30/38	m ³	1.0		
	(d) Formwork of concrete under subitem 22.07(c) above				
	(1) Vertical formwork for F1 surface finish	m ²	1.0		
	(2) Vertical formwork for F2 surface finish	m ²	1.0		
	(3) Horizontal formwork for F2 surface finish	m ²	1.0		
22.08	Concrete backfill for culverts				
	(a) Class 20/19	m ³	1.0		
	(b) Class 20/38	m ³	1.0		
22.10	Steel reinforcement				
	(a) Mild steel bars	t	1.0		
	(b) High-tensile steel bars	t	1.0		
	(c) Welded steel fabric	kg	1.0		
Total Carried Forward					

SECTION 2200

Number	Item Description	Unit	Quantity	Rate	Amount
					R
Brought Forward					
22.12	Removing existing concrete				
	(a) Plain concrete	m ³	1.0		
	(b) Reinforced concrete	m ³	1.0		
22.13	Remove and re-laying existing pipes				
	(a) Class A bedding				
	(2) 450mm dia. 50D	m	1.0		
	(3) 600mm dia. 50D	m	1.0		
	(4) 750mm dia. 50D	m	1.0		
	(5) 900mm dia. 50D	m	1.0		
22.14	Removing and stacking existing prefabricated culverts (type and size indicated)	m	1.0		
Total Carried Forward To Summary					

SECTION 2300

Number	Item Description	Unit	Quantity	Rate	Amount
					R
23.00	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS				
23.01	Concrete kerbing				
	(a) Prefabricated mountable kerb, SABS 927 as shown on the drawings				
	(i) Figure 3 - Barrier kerbs	m	1.0		
	(ii) Figure 7 - Semi-mountable kerbs	m	1.0		
	(iii) Figure 8c - Mountable kerbs	m	1.0		
	(iv) Figure 12 - Edge restraints	m	1.0		
	(c) In-situ cast Mountable Kerbing (25 Mpa) Fig 8c	m	1.0		
23.02	Concrete kerbing-channelling combination				
	(a) Prefabricated battered kerb, SABS 927 fig 3, with 300 mm wide cast in situ class 25/19 concrete channel, as shown on the drawings.	m	1.0		
	(b) Prefabricated battered kerb, SABS 927 fig 7, with 300 mm wide cast in situ class 25/19 concrete channel, as shown on the drawings.	m	1.0		
23.07	Trimming of excavations for concrete-lined open drains				
	(a) In soft material	m ²	1.0		
	(b) In hard material	m ²	1.0		
23.08	Concrete lining for open drains				
	(a) Cast in situ concrete-25MPa/19mm for standard side drains	m ³	Each		
23.09	Formwork to cast in situ concrete lining for open drains (Class F2 surface finish)				
	(a) To sides with formwork on the internal face only	m ²	1.0		
	(b) To sides with formwork on both internal and external faces (each face measured)	m ²	1.0		
	(c) To ends of slabs	m ²	1.0		
23.10	Sealed joints in concrete linings of open drains	m	1.0		
23.12	Steel reinforcement				
	(a) Mild Steel Bars	t	1.0		
	(b) High tensile steel bar	t	1.0		
Total Carried Forward To Summary					

SECTION M2500

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M2500	CLEANING OF CONCRETE DRAINS AND CHANNELS				
M250.01	Cleaning of concrete drainage channels	month	1.0		
BM250.02	Additional cleaning of concrete drainage channels 1km long				
(a)	Hand cleaning	No	1.0		
(b)	Machine cleaning	No	1.0		
Total Carried Forward To Summary					

SECTION M2600

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M2600	CLEANING AND MAINTENANCE OF EXISTING EARTH CHANNELS				
M260.01	Cleaning earth drains and channels	m ³	1.0		
M260.02	Repairing of earth drains and channels	m ³	1.0		
M260.03	Banks and dykes	m ³	1.0		
M260.04	Overhaul on material hauled in excess of 1,0 km	m ³ -km	1.0		
Total Carried Forward To Summary					

SECTION 3300

Number	Item Description	Unit	Quantity	Rate	Amount
					R
33.00	MASS EARTHWORKS				
33.01	Cut and borrow to fill, including all-haul				
	(c) Rock fill	m ³	1.0		
	(e) Pioneer layer	m ³	1.0		
33.04	Cut to spoil, including all-haul . Material obtained from:				
	(a) Soft excavation	m ³	1.0		
	(b) Intermediate excavation	m ³	1.0		
	(c) Hard excavation	m ³	1.0		
33.10	Roadbed preparation and the compaction of material				
	(a) Compaction to 90% of modified AASHTO density	m ³	1.0		
	(b) Compaction to 93% of modified AASHTO density	m ³	1.0		
Total Carried Forward To Summary					

SECTION 3400

Number	Item Description	Unit	Quantity	Rate	Amount
					R
34.00	PAVEMENT LAYERS OF GRAVEL MATERIAL				
B34.01	Pavement layers constructed from gravel taken from commercial sources or from contractor's own sources				
	(c) Gravel subbase (unstabilized gravel - G4) compacted to:				
	(i) 95% of modified AASHTO a compacted layer thickness of 150mm	m ³	1.0		
	(d) Gravel subbase (chemically stabilized G6 material) compacted to:				
	(i) 95% of modified AASHTO density for compacted layer thickness of 150mm	m ³	1.0		
B34.04	In situ reconstruction of existing pavement layers as:				
	(e) Gravel subbase (chemically stabilized material) compacted to 95% of modified AASHTO density, using:				
	(i) Non-cemented material for compacted layer thickness of 150mm)	m ³	1.0		
	(ii) Cemented material for compacted layer thickness of 150mm	m ³	1.0		
34.07	Extra over item 34.04 for temporarily blading the material to windrow	m ³	1.0		
34/32.06	Stockpiling of material	m ²	1.0		
Total Carried Forward To Summary					

SECTION 3500

Number	Item Description	Unit	Quantity	Rate	Amount
					R
35.00	STABILIZATION				
35.01	Chemical stabilization extra over unstabilized compacted layers				
	(c) Gravel subbase 150 mm thick	m ²	1.0		
35.02	Chemical stabilizing agent:				
	(a) Cement (CEM II A-L 42.5)	t	1.0		
	(c) Road lime, calcium / magnesium / magnesium / dolomitic type	t	1.0		
35.08	Bituminous stabilizing agent:				
	(a) Anionic stable grade bituminous emulsion (60% net bitumen)	litre	1.0		
Total Carried Forward To Summary					

SECTION 3600

Number	Item Description	Unit	Quantity	Rate	Amount
					R
36.00	CRUSHED STONE BASE				
36.01	Crushed-stone base				
	(a) Constructed from type G1 material obtained from commercial sources and compacted to 88% of apparent relative density, 150mm thick layer	m ³	1.0		
Total Carried Forward To Summary					

SECTION 3800

Number	Item Description	Unit	Quantity	Rate	Amount
					R
38.00	BREAKING UP EXISTING PAVEMENT LAYERS				
38.01	Excavating and removing existing bituminous material (except milled material):				
	(a) Material intended for recycling with the average depth of excavation:				
	(i) Not exceeding 30 mm	m ²	1.0		
	(ii) Exceeding 30 mm but not exceeding 60 mm	m ²	1.0		
	(iii) Exceeding 60 mm	m ²	1.0		
B38.02	Milling out existing bituminous material with an average milling depth:				
	(a) Not exceeding 30 mm	m ³	1.0		
	(b) Exceeding 30 mm but not exceeding 60 mm	m ³	1.0		
	(c) Exceeding 60 mm	m ³	1.0		
B38.03	Milling out cemented / non-cemented material with an average milling depth :				
	(a) Not exceeding 30 mm	m ³	1.0		
	(b) Exceeding 30 mm but not exceeding 60 mm	m ³	1.0		
	(c) Exceeding 60 mm	m ³	1.0		
B38.04	Excavating and spoiling material from an existing pavement and/or the underlying fill:				
	(a) All types of material	m ³	1.0		
Total Carried Forward To Summary					

SECTION 3900

Number	Item Description	Unit	Quantity	Rate	Amount
					R
39.00	PATCHING AND REPAIRING EDGE BREAKS				
39.01	Sawing asphalt or cemented pavement layers for patching:				
	(a) Sawing asphalt to an average depth:				
	(i) Not exceeding 50 mm	m ²	1.0		
	(ii) Exceeding 50 mm but not exceeding 100 mm	m ²	1.0		
	(iii) Exceeding 100 mm	m ²	1.0		
B39.02	Excavation in existing pavements for patching in :				
	(a) Asphalt layers	m ³	1.0		
	(b) Cemented layers	m ³	1.0		
	(c) All other layers	m ²	1.0		
39.03	Backfilling of excavations for patching				
	(a) Chemically stabilized pavement material 2% bitumen emulsion (60%) and 1% cement (CEM II A-L 42.5) for a patch with a surface area:				
	(i) Not exceeding 5 m ²	m ³	1.0		
	(ii) Exceeding 5 m ² but not exceeding 100 m ²	m ³	1.0		
	(iii) Exceeding 100 m ²	m ³	1.0		
39.04	Compacting the floor of excavations for patching	m ²	1.0		
39.05	Cutting back the edges of the existing surfacing for the repairing of edge breaks	m	1.0		
Total Carried Forward To Summary					

SECTION 4100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
41.00	PRIME COAT				
41.01	Prime coat:				
	(a) RTH 3/12p or RTL 3/12p tar prime	litre	1.0		
	(b) Quick drying RTH 1/4P tar prime	litre	1.0		
	(c) MC-30 cut-back bitumen	litre	1.0		
	(d) MC-70 cut-back bitumen	litre	1.0		
	(e) Invert bituminous emulsion	litre	1.0		
41.02	Aggregate for blinding	m ²	1.0		
41.03	Extra over item 41.01 for applying the prime coat in areas accessible only to hand held equipment	litre	1.0		
Total Carried Forward To Summary					

SECTION 4400

Number	Item Description	Unit	Quantity	Rate	Amount
					R
44.00	SINGLE SEALS				
44.01	Single seal surface				
	(c) Using 9,5 mm grade 1/2/3 aggregate				
	(i) With bitumen rubber (nominal application rate)	m ²	1.0		
	(ii) With 80/100 penetration grade bitumen (nominal application rate)	m ²	1.0		
	(iii) With RMB binder 3% synthetic rubber (nominal application rate)	m ²	1.0		
	(d) Using 13,2 mm grade 1/2/3 aggregate				
	(i) With bitumen rubber (nominal application rate)	m ²	1.0		
	(ii) With 80/100 penetration grade bitumen (nominal application rate)	m ²	1.0		
	(iii) With RMB binder 3% synthetic rubber (nominal application rate 2.0l / m2)	m ²	1.0		
44.02	Bituminous binder variations				
	(a) Road grade B4 bitumen	litre	1.0		
	(b) Road grade B8 bitumen	litre	1.0		
	(f) MC-3000 cut-back bitumen	litre	1.0		
	(g) Bitumen-rubber based B4 with 20-24% rubber	litre	1.0		
	(h) RMB Binder	litre	1.0		
	(j) Precoating fluid				
	(i) Petrosote	litre	1.0		
44.03	Aggregate variations (state grade):				
	(c) 9,5 mm grade 1/2/3 aggregate	m ³	1.0		
	(d) 13,2 mm grade 1/2/3 aggregate	m ³	1.0		
44.05	Precoating the aggregate at a rate of 12 litre/m ³ or as specified, using Petrosote or approved equivalent	litre	1.0		
Total Carried Forward To Summary					

SECTION 4500

Number	Item Description	Unit	Quantity	Rate	Amount
					R
45.00	DOUBLE SEALS				
45.01	Double seal using :				
	(a) 19,0 mm and 9,5 mm grade 1/2/3 aggregate with 80/100 penetration-grade	m ²	1.0		
	(c) 13,2 mm and 6,7 mm grade 1/2/3 aggregate with 80/100 penetration-grade	m ²	1.0		
45.02	Bituminous binder variations:				
	(a) 150/200 penetration-grade bitumen	litre	1.0		
	(b) 80/100 penetration-grade bitumen	litre	1.0		
45.04	Application of fog spray consisting of:				
	(b) 30% spray-grade emulsion anionic/cationic	litre	1.0		
45.05	Precoating the aggregate at a rate of 12 litre/m ³ (or as specified) using Petrosote or approved equivalent	m ³	1.0		
45.07	Extra over item 45.01 for work in areas inaccessible to mechanical equipment	m ²	1.0		
Total Carried Forward To Summary					

SECTION 4800

Number	Item Description	Unit	Quantity	Rate	Amount
					R
48.00	TREATMENT OF AN EXISTING SURFACE EXHIBITING CERTAIN DEFECTS				
48.01	Treatment with diluted bituminous emulsion :				
	(a) 30% bitumen emulsion	litre	1.0		
	(d) 60% bitumen emulsion	litre	1.0		
48.03	Slurry seal:				
	(a) Tack coat using 30% bitumen emulsion	litre	1.0		
	(b) Slurry applied by hand	m ³	1.0		
	(c) Slurry applied by spreader box	m ³	1.0		
48.05	Repairing edge breaks in surfacing:				
	(a) Tack coat using 30% bitumen emulsion	litre	1.0		
	(b) Reconstructing edges using medium continuously-graded asphalt	t	1.0		
48.06	Cleaning the cracks with compressed air (Hot Lance Method)	m	1.0		
48.07	Applying bituminous binders and herbicides for sealing cracks:				
	(a) Herbicide	litre	1.0		
	(b) MSP/1 or similar primer	litre	1.0		
	(c) Anionic stable-grade emulsion mixed with synthetic modifies	litre	1.0		
	(d) Hot bitumen rubber	litre	1.0		
48.08	Cold rubber-slurry mix for sealing cracks	m ³	1.0		
Total Carried Forward To Summary					

SECTION 5100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M51.00	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION				
	Stone pitching				
	(a) Plain pitching				
	(i) Method 1	m ²	1.0		
	(b) Grouted pitching	m ²	1.0		
M51.04	Concrete pitching and block paving (a) cast insitu concrete pitching class 30/19, 100mm thick (b) segmental block paving	m ²	1.0		
	(i) 60mm thick interlocking paving blocks	m ²	1.0		
	(i) 80mm thick interlocking paving blocks	m ²	1.0		
	(e) sand fill for paving placed on bridge sidewalks	m ²	1.0		
M51.05	Concrete edge beams				
	(a) Class 25/19	m ³	1.0		
M51.06	Foundation trenches	m ³	1.0		
M51.07	Provision of approved herbicide and ant poison:	Prov sum	1.0	50 000.00	50 000.00
Total Carried Forward To Summary					

SECTION 5200

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M52.00	GABIONS				
M520.01	Foundation trench excavation and backfilling				
	(a) In solid rock (material which requires blasting)	m ²	1.0		
	(b) In all other classes of material	m ²	1.0		
M520.02	Surface preparation for bedding the gabions	m ²	1.0		
M520.03	Gabions				
	(a) Gabion baskets (2m x 1m x 1m with 80 x 100mm mesh)				
	(b) Gabion mattresses (2m x 2m x 0.3m with 80mm x 100mm mesh)				
M52.04	Extra over Item M520.03 for supplying gabions with PVC-coated wire	No	1.0		
M52.05	Filter fabric (U24 or similar)	m ²	1.0		
Total Carried Forward To Summary					

Number	Item Description	Unit	Quantity	Rate	Amount
					R
54.00	GUARDRAILS				
54.01	Guardrails on timber posts:				
	(a) Galvanised	m	1.0		
	(b) Painted	m	1.0		
54.02	Guardrails on steel posts:				
	(a) Galvanised	m	1.0		
	(b) Painted	m	1.0		
54.03	Extra over items 54.01, 54.02 and 54.11 for horizontally curved guardrails factory bent to a radius less than 45m	m	1.0		
54.04	End treatments:				
	(a) End wings	No	1.0		
	(b) Bull noses	No	1.0		
	(c) Bridge adaptors	No	1.0		
54.05	Additional guardrail posts:				
	(a) Timber	No	1.0		
	(b) Steel	No	1.0		
54.06	Reflective plates	No	1.0		
54.07	Removing existing guardrails	m	1.0		
54.08	Renovating guardrail material:	m	1.0		
	(a) Guardrails and end treatments	m	1.0		
	(b) Posts	No	1.0		
54.09	Re-erection of guardrails with recovered and/or new material:				
	(a) Single guardrail	m	1.0		
	(b) Double guardrail	m	1.0		
54.10	Re-erection of end treatments with recovered material:				
	(a) End wings	No	1.0		
Total Carried Forward					

SECTION 5400

Number	Item Description	Unit	Quantity	Rate	Amount
					R
Brought Forward					
	(b) Bull noses	No	1.0		
	(c) Bridge adaptors	No	1.0		
	(d) End treatments with single guardrails	No	1.0		
	(e) End treatments with double guardrails	No	1.0		
	(f) Terminal sections complete with anchor block	No	1.0		
54.11	New material required for the re-erection of guardrails with recovered materials:				
	(a) Guardrails	m	1.0		
	(b) Timber posts	No	1.0		
	(c) Steel posts	No	1.0		
	(d) Reflective plates	No	1.0		
	(e) Spacer blocks	No	1.0		
	(f) Splice bolt complete with nut and washer	No	1.0		
	(g) Post bolt complete with nut and washer	No	1.0		
	(h) Reinforcing plates	No	1.0		
54.12	Extra over items 54.01 and 54.02 for drilling and blasting holes for guardrail posts :				
	(a) Drilling of holes	No	1.0		
	(b) Blasting of holes	No			
54.13	Steel base plats for timber guardrail posts on structures	No	1.0		
Total Carried Forward To Summary					

SECTION 5500

Number	Item Description	Unit	Quantity	Rate	Amount
					R
55.00	FENCING				
55.01	Clearing the fence line, 2m wide strip	km	Each		
55.02	Supply and erect new fencing material for new fences and for supplementing material in existing fences which are being repaired or removed:				
	(a) Zinc-coated barbed wire (SABS 675)				
	(1) High-tensile-grade, single-strand 3,15mm x 2,50mm oval-shaped wire				
	(i) Galvanised, Class A	km	1.0		
	(ii) Galvanised, Class C	km	1.0		
	(g) Standards				
	(1) 1,86m x 2,5 kg/m mild steel y section	No	1.0		
	(h) Droppers				
	(1) 1,4m x 0,56 kg/m mild steel ridge back section	No	1.0		
	(b) Inclined:				
	(1) Steel stays and anchors (2130 x 60 x 3mm mild steel tubing)	No	1.0		
	(2) Timber stays and anchors (2000 x 100 diameter)	No	1.0		
55.07	Ringbolts for anchoring fencing to structures	No	1.0		
55.08	Drilling and blasting of holes for posts and anchors	No	1.0		
Total Carried Forward To Summary					

SECTION 5600

Number	Item Description	Unit	Quantity	Rate	Amount
					R
56.00	ROAD SIGNS				
56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:				
	(a) Aluminium sheet (2,0 mm thick)	t	1.0		
	(i) Area not exceeding 2 m ²	m ²	1.0		
	(ii) Area exceeding 2 m ² but not 10 m ²	m ²	1.0		
	(iii) Area exceeding 10 m ²	m ²	1.0		
	(b) Aluminium sections				
	(i) Alcan die number 18159 or similar - all sizes	m ²	1.0		
	(c) Prepainted galvanized steel plate (chromadek 1,6 mm thick or approved equivalent):				
	(i) Area not exceeding 2 m ²	m ²	1.0		
	(ii) Area exceeding 2 m ² but not 10 m ²	m ²	1.0		
	(iii) Area exceeding 10 m ²	m ²	1.0		
	(d) Prepainted galvanized steel profiles (200 mm high chromadek or approved equivalent):				
	(i) Area not exceeding 2 m ²	m ²	1.0		
	(ii) Area exceeding 2 m ² but not 10 m ²	m ²	1.0		
	(iii) Area exceeding 10 m ²	m ²	1.0		
	(e) Other material (details indicated)				
	(i) Octagonal				
	(i) Area not exceeding 2 m ²	No	1.0		
	(ii) Area exceeding 2 m ² but not 10 m ²	No	1.0		
	(iii) Area exceeding 10 m ²	No	1.0		
56.02	Extra over item 56.01 for using:				
	(a) Background of retro-reflective material of:				
	(i) Class 1	m ²	1.0		
	(ii) Class 11	m ²	1.0		
Total Carried Forward					

SECTION 5600

Number	Item Description	Unit	Quantity	Rate	Amount
					R
Brought Forward					
	(iii) Class 111	m ²	Each		
	(b) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:				
	(i) Class 1	m ²	1.0		
	(ii) Class 11	m ²	1.0		
56.03	Road sign supports (overhead road sign structures excluded):				
	a) Steel tubing (diameter and wall thickness indicated)	t	1.0		
	b) Timber (diameter and type indicated)	m	1.0		
56.04	Kilometre posts				
	(a) Concrete	No	1.0		
	(b) Timber and plates	No	1.0		
56.05	Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	1.0		
56.06	Extra over item 56.05 for cement-treated soil backfill	m ³	1.0		
56.07	Extra over item 56.05 for rock excavation	m ³	1.0		
56.08	Dismantling, storing and re-erecting road signs with a surface area of:				
	(a) Up to 2 m ²	No	1.0		
	(b) Exceeding 2 m ² but not 10 m ²	No	1.0		
	(c) Exceeding 10 m ²	No	1.0		
56.09	Dismantling and storing road signs with a surface area of:				
	(a) Up to 2 m ²	No	1.0		
	(b) Exceeding 2 m ² but not 10 m ²	No	1.0		
	(c) Exceeding 10 m ²	No	1.0		
Total Carried Forward To Summary					

SECTION 5700

Number	Item Description	Unit	Quantity	Rate	Amount
					R
57.00	ROAD MARKINGS				
57.02	Retro-reflective road marking paint:				
	(a) White lines (broken or unbroken)				
	(i) 100 mm wide	km	1.0		
	(ii) 150 mm wide	km	1.0		
	(iii) 200 mm wide	km	1.0		
	(b) Yellow lines (broken or unbroken)				
	(i) 100 mm wide	km	1.0		
	(ii) 150 mm wide	km	1.0		
	(iii) 200 mm wide	km	1.0		
	(c) Red lines (broken or unbroken)				
	(i) 100 mm wide	km	1.0		
	(d) White lettering and symbols	m ²	1.0		
	(e) Yellow lettering and symbols	m ²	1.0		
	(f) Transverse lines, painted island and arrestor bed markings (any colour)	m ²	1.0		
57.03	Hot-melt plastic road-marking material (particulars stated):				
	(a) White lines (broken or unbroken)				
	(i) 100 mm wide	km	1.0		
	(ii) 150 mm wide	km	1.0		
	(b) Yellow lines (broken or unbroken)				
	(i) 100 mm wide	km	1.0		
	(ii) 150 mm wide	km	1.0		
	(d) White lettering and symbols	m ²	1.0		
	(e) Yellow lettering and symbols	m ²	1.0		
57.04	Variations in rate of application:				
	(a) White paint	litre	1.0		
Total Carried Forward					

SECTION 5700

Number	Item Description	Unit	Quantity	Rate	Amount
					R
Brought Forward					
	(b) Yellow paint	litre	1.0		
	(c) Red paint	litre	1.0		
	(d) Retro-reflective beads	kg	1.0		
	(e) Plastic road-marking paints	litre	1.0		
B57.05	Road studs				
	(a) PFG Armourlight, Stimsonite, Lynkor or approved equivalent:				
	(i) Bi-directional, white/red	No	1.0		
	(ii) Bi-directional, amber/red	No	1.0		
	(iii) Bi-directional, white/white	No	1.0		
	(iv) Bi-directional, amber/amber	No	1.0		
	(v) Bi-directional, red/red	No	1.0		
	(vi) Uni-directional, any colour	No	1.0		
57.06	Setting out and premarking the lines (Excluding traffic-island markings, lettering and symbols)	km	1.0		
Total Carried Forward To Summary					

SECTION M4700

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M4700	MAINTENANCE OF LAY-BYES AND BUS SHELTERS				
BM470.01	Maintenance of lay-byes and Bus Shelters				
(a)	Maintenance of lay-byes	No	1.0		
(b)	Maintenance Bus Shelters				
	(i) Replacement of steel posts	t	1.0		
	ii) Replacement of louvres	t	1.0		
	iii) Steel Painting	m ²	1.0		
	iv) Repair damaged concrete	m ²	1.0		
Total Carried Forward To Summary					

SECTION M6100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
BM6100	GRASS CUTTING: SHOULDER AND GENERAL MOWING				
M610.01	Shoulder mowing and removal of grass cuttings				
(a)	Reserve with single carriageway (up to 3.0 m from edge of road)				
	(i) Using labour based methods only	m ²	1.0		
	(ii) Using any accepted method	ha	1.0		
BM610.02	General mowing and removal of grass cuttings (in road reserve)				
(a)	Reserve with single carriageway				
	(i) Using labour based methods only	m ²	1.0		
	(ii) Using any accepted method	ha	1.0		
(b)	Intersections mowing as shown on the drawings or as directed by the engineer				
	(i) Using labour based methods only	m ²	1.0		
	(ii) Using any accepted method	ha	1.0		
BM611.02	Cutting of designated areas				
(a)	Road signs and reference marker boards				
	(i) Using labour based methods only	m ²	1.0		
	(ii) Using any accepted method	ha	1.0		
Total Carried Forward To Summary					

SECTION M6300

Number	Item Description	Unit	Quantity	Rate	Amount
					R
M6300	REMOVAL OF UNDESIRABLE VEGETATION: PHYSICAL ERADICATION				
BM630.01	Eradication of undesirable vegetation				
(a)	Initial eradication				
(i)	Undesirable vegetation and trees with a girth of 0 to 150 mm	No	1.0		
(ii)	Trees with a girth of 151 to 500 mm	No	1.0		
M630.02	Tree felling on instruction of the Engineer				
(a)	Girth 151 mm to 500 mm	No	1.0		
M630.03	Burning of fire breaks per operation				
(a)	5 m wide fire breaks in median	No	1.0		
(b)	5 m wide fire breaks from edge of road surface to road reserve fence	No	1.0		
M630.04	Additional eradication of undesirable vegetation on instruction of the Engineer	ha	1.0		
Total Carried Forward To Summary					

SECTION 8100

Number	Item Description	Unit	Quantity	Rate	Amount
					R
8100	TESTING MATERIALS AND WORKMANSHIP				
81.02	Other special tests requested by the engineer	Prov sum	1.0	100 000.00	100 000.00
81.02	Providing testing equipment				
	a) Rolling straight-edge	No	1.0		
	b) Core drill	No	1.0		
Total Carried Forward To Summary					

SECTION 11000

Number	Item Description	Unit	Quantity	Rate	Amount
					R
11000	MISCELLANEOUS ACTION				
B1110.01	Raising of manholes	No	1.0		
	Supply and install cast iron manhole covers with a lift of 30mm. The rate shall include full compensation for supplying and installing the collar				
	The collar shall be fixed to the existing manhole with a rapid setting steel to steel epoxy.				
B1110.02	Traffic calming devices:	No	1.0		
	Asphalt speed humps complete as detailed, to suit road width.	No	1.0		
	(a) Type A	m	1.0		
	(b) Type B	m	1.0		
	(c) Type C	m	1.0		
	(d) Type D	m	1.0		
	(e) Extra over items (a), (b), (c) above for road markings complete as detailed.	No	1.0		
	(f) Extra over items (d) above for road markings complete as detailed	No	1.0		
	(g) Extra -over item (a),(b),(c) above for the complete supply and erection of road signs as detailed.	No	1.0		
	(h) Extra -over item (d), above for the complete supply and erection of road signs as detail	No	1.0		
B1110.04	Repair and maintenance of railway sidings				
	(a) Replacement of concrete sleepers with Concrete sleepers	No	1.0		
	(b) Grass cutting	ha	1.0		
	(c) Tree felling on instruction of the Engineer (Trees with a girth of 151 to 500 mm	No	1.0		
Total Carried Forward To Summary					

C14.1 ACCESS FOR BRIDGE REHABILITAION

Item		Description	Unit	Quantity	Rate	Amount
						R
C14.1		ACCESS FOR BRIDGE REHABILITATION				
C14.1.1		Temporary access structures and work platforms (by element):				
	C14.1.1.1	Access and platforms to locations as described as well as dismantling and removal at completion (heights assessed by Contractor):				
		(a) Access to all structural steel elements to be refurbished	lump sum	1.0		
		(b) Access scaffolding for piers and abutments	lump sum	1.0		
		(c)Diverting of river to gain access to Piers	lump sum	1.0		
C14.1.3		Access at end of defects liability period (description of location)	lump sum	1.0		
C14.1.5		Provision of designs and drawings of access structures and platforms by an ECSA Registered Professional Engineer or Technologist (For all members applicable under item BC14.1.1.1)	lump sum	1.0		
Total Carried Forward To Summary						

C14.3 DEMOLITION AND REMOVAL OF STRUCTURAL CONCRETE AND STEELWORK

Item		Description	Unit	Quantity	Rate	Amount R
C14.3		DEMOLITION AND REMOVAL OF STRUCTURAL CONCRETE AND STEELWORK				
C14.3.1		Demolition of concrete members or elements:				
	C14.3.1.2	Partial member or element (Spalled and damaged surfaces on Abutments and Piers)	(m ³)	1.0		
C14.3.2		Demolition of concrete members or elements by labour enhanced construction:				
	C14.3.2.2	Partial member or element (Abutment and Piers)	(m ³)	1.0		
C14.3.3		Demolition of structural steel structures, members or elements :				
	C14.3.3.2	Partial member or element	(t)	1.0		
C14.3.4		Demolition of structural steel structures, members or elements by labour optimised construction :				
	C14.3.4.2	Partial member or element	(t)	1.0		
C14.3.5		Removal of metal sections embedded in concrete	(No.)	1.0		
C14.3.6		Establishment on site for hydro-demolition equipment	lump sum	1.0		
Total Carried Forward To Summary						

C14.4 SURFACE AND STRUCTURAL REPAIR OF CONCRETE MEMBERS

Item		Description	Unit	Quantity	Rate	Amount R
C14.4		SURFACE AND STRUCTURAL REPAIR OF CONCRETE MEMBERS				
BC14.4.2		Epoxy mortar				
	(a)	a) Sikatop Armatec - 110 EpoCem or similar approved applied as per manufacturers specifications		1.0		
	(b)	Apply Sika Monotop-412 NFG or similar approved on chased concrete surfaces as per manufacturers specifications.		1.0		
Total Carried Forward To Summary						

C14.7 PROTECTIVE COATINGS AND TREATMENTS FOR CONCRETE

Item	Description	Unit	Quantity	Rate	Amount
					R
C14.7	PROTECTIVE COATINGS AND TREATMENTS FOR CONCRETE				
C14.7.1	Cleaning and preparation of concrete surface	square metre (m ²)	1.0		
BC14.7.2	Application of protective coatings and treatments (type and application rate indicated)	square metre (m ²)	1.0		
BC14.7.2.1	Apply Sikagard 550W Elastic Primer (2 Coats) on all finished concrete surfaces.				
BC14.7.2.2	Apply Sikagard 550W Elastic (2 Coats) on all finished concrete surfaces.				
C14.7.3	On site monitoring and supply of written product performance guarantee	lump sum	1.0		
C14.7.4	Trial sample panels	square metre (m ²)	1.0		
Total Carried Forward To Summary					

C14.9 REPAIR AND REPLACEMENT OF ANCILLARY STRUCTURAL ELEMENTS

Item		Description	Unit	Quantity	Rate	Amount
						R
C14.9		REPAIR AND REPLACEMENT OF ANCILLARY STRUCTURAL ELEMENTS				
C14.9.1		Removal of debris from expansion gaps (description)	metre (m)	1.0		
C14.9.3		Service and repair of existing joint system:				
	C14.9.3.1	Service and repair of bridge joints (7 x Thormajoint (300mm x 50mm))	metre (m)	1.0		
BC14.9.6		Repair of handrails (50mm dia. x 4.0mm Circular Hollow Section Steel railings including fastening brackets)	metre (m)	1.0		
C14.9.14		Bridge number plates:				
	C14.9.14.2	New number plate	number (No.)	1.0		
BC14.9.18		Removal and disposal of existing steel railings and damaged brackets		1.0		
Total Carried Forward To Summary						

C14.11 REPAIR OF STEEL ELEMENTS

Item	Description	Unit	Quantity	Rate	Amount
					R
C14.11	REPAIR OF STEEL ELEMENTS				
BC14.11.1	Refurbishment of Structural Steelwork				
	(a) Sprayed-on metal:				
	(1) Apply 2 layers Sikagard-63N corrosion protection or similar		1.0		
	(2) Sand blast or Wet grid blasting for preparation of steel for corrosion protection		1.0		
Total Carried Forward To Summary					

SUMMARY OF SECTIONS

Section	Description	Amount
		R
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1500	ACCOMMODATION OF TRAFFIC	
M1500	CRACK AND JOINT SEALING OF CONCRETE PAVEMENTS	
1600	OVERHAUL	
M1700	REPAIR OF SLOPE FAILURES AND WASHAWAYS	
1700	CLEARING AND GRUBBING	
M9100	DAYWORKS SCHEDULE	
2100	DRAINS	
M2100	REPAIR AND MAINTENANCE OF INLET AND OUTLET STRUCTURES	
2200	PREFABRICATED CULVERTS	
2300	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
M2500	CLEANING OF CONCRETE DRAINS AND CHANNELS	
M2600	CLEANING AND MAINTENANCE OF EXISTING EARTH CHANNELS	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
3600	CRUSHED STONE BASE	
3800	BREAKING UP EXISTING PAVEMENT LAYERS	
3900	PATCHING AND REPAIRING EDGE BREAKS	
4100	PRIME COAT	
4200	ASPHALT BASE AND SURFACING	
4400	SINGLE SEALS	
4500	DOUBLE SEALS	
4800	TREATMENT OF AN EXISTING SURFACE EXHIBITING CERTAIN DEFECTS	
M5100	PITCHING, STONEMASONRY AND PROTECTION AGAINST EROSION	
M5200	GABIONS	
5400	GUARDRAILS	
5500	FENCING	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
M4700	MAINTENANCE OF LAY-BYES AND BUS SHELTERS	

M6100	CONTROLLING VEGETATION GROWTH: MOWING AND CUTTING	
M6300	REMOVAL OF UNDESIRABLE VEGETATION: PHYSICAL ERADICATION	
8100	TESTING MATERIALS AND WORKMANSHIP	
11000	MISCELLANEOUS ACTION	
C14.1	ACCESS FOR BRIDGE REHABILITATION	
C14.3	DEMOLITION AND REMOVAL OF STRUCTURAL CONCRETE AND STEELWORK	
C14.4	SURFACE AND STRUCTURAL REPAIR OF CONCRETE MEMBERS	
C14.7	PROTECTIVE COATINGS AND TREATMENTS FOR CONCRETE	
C14.9	REPAIR AND REPLACEMENT OF ANCILLARY STRUCTURAL ELEMENTS	
C14.11	REPAIR OF STEEL ELEMENTS	
A	SUBTOTAL	
	Add 15% for B13.01 (a) to (c).	
B	SUBTOTAL	
	Year 1 CONTRACT PRICE ADJUSTMENT (CPA) (0%)	
C	SUBTOTAL	
	Year 2 CONTRACT PRICE ADJUSTMENT (CPA) (7%)	
D	SUBTOTAL	
	Year 3 CONTRACT PRICE ADJUSTMENT (CPA) (7%)	
E	SUBTOTAL	
	Add 15% VAT	
Total Carried Forward to Form of Offer		

PART C3 SCOPE OF WORKS

PART C3 SCOPE OF WORKS**CONTENTS****C3.1 DESCRIPTION OF WORKS**

- C3.1.1 City of Mbombela's objectives
- C3.1.2 Overview of the Works
- C3.1.3 Extent of the Works
- C3.1.4 Location of the Works
- C3.1.5 Temporary Works

C3.2 ENGINEERING

- C3.2.1 Design
- C3.2.2 City of Mbombela's Design
- C3.2.3 Contractor's Design
- C3.2.4 Drawings
- C3.2.5 Design procedure

C3.3 PROCUREMENT

- C3.3.1 Preferential Procurement
- C3.3.2 Subcontracting

C3.4 CONSTRUCTION

- C3.4.1 Works specifications
- C3.4.2 Site establishment
- C3.4.3 Plant & Materials
- C3.4.4 Construction equipment
- C3.4.5 Existing services
- C3.4.6 Variations and additions to COLTO Standardized specifications.

C3.5 MANAGEMENT OF THE WORKS

- C3.5.1 Generic Specification

C3.6 HEALTH AND SAFETY

- C3.6.1 Health and Safety requirements and procedures
- C3.6.2 Protection of the Public
- C3.6.3 Barricades and lighting
- C3.6.4 Traffic control on roads
- C3.6.5 Measures against disease and epidemics
- C3.6.6 Aids awareness

C3.7 REFERENCES TO THE SCOPE OF WORKS IN TERMS OF THE ENVIRONMENTAL MANAGEMENT PLAN (EMP)**C3.8 SITE INFORMATION**

C3.8.1 Nature of ground and subsoil conditions

C3.8.2 Tender drawings

C3.8.3 Locality map

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 CITY OF MBOMBELA'S OBJECTIVES

The project objectives are in line with the City of Mbombela's objectives of service delivery, job creation and poverty alleviation. The project is specifically aimed at maintenance of roads and stormwater, minor rehabilitation, patchwork and reseal within the City of Mbombela, on an as and when required basis for the period with effect from date of award until 30 June 2027. As part of the implementation of the works, job creation will occur through the employment of local labourers, local Sub contractors, local suppliers and the like.

C3.1.2 OVERVIEW OF THE WORKS

The Contract will be awarded on an as and when required basis for the period with effect date of award until 30 June 2027. The Contractor shall be issued with works orders and which falls within the allocated contract budget. The minimum value of the works is nil rand.

The description of the works contained in C3.1.3 is merely an outline of the Contract works to be undertaken and shall not limit the work to be carried out by the Contractor under this Contract. The Schedule of Quantities provide only for the type of work that may be undertaken and the quantities are provided purely for bidding purposes and is not indicative of the expected or estimated quantities. The variation of the quantities shall not affect the rates bidden nor shall it constitute a variation to the scope and nature of the works.

C3.1.3 EXTENT OF WORKS

The Works that may be carried out by the Contractor under this Contract comprise mainly the following:

Patching

Patching will be done on existing surfaced roads as instructed, which may include:

Surfacing failures

Street crossings of service trenches

Edge beaks

Localised structural failures

Mechanical damages to the surface

Preparatory patching as required for reseal activities

With the following materials:

Chemical stabilized or unstabilised gravel

Emulsion treated crushed stone base

Asphalt base and surfacing

Bitumen treated bases (BTB)

Hot mix asphalt, mixed by an approved asphalt plant, shall be used.

Rehabilitation of road pavements

The rehabilitation of existing pavements may include:

Milling and/or in-situ recycling of pavement materials

Asphalt base and surface overlays

In-situ re-construction of road layers

Importation and construction of road layers

Light rehabilitation of road pavements

The works may include the treatment of existing surfaced roads exhibiting certain defects that may include:

Bituminous emulsion fog spray
Slurry seals
Sealing of cracks
Repair of potholes
Minor sundry work such as:
Excavations and construction of road layers
Construction/installation of kerbs
Construction of speed humps

C3.1.4 LOCATION OF THE WORKS

The Contract shall be located within the boundaries of the City of Mbombela in various Service Delivery Areas.

The locality of the Service Delivery Areas is indicated on the locality map included in Part C4. The actual nature and location of the works within the Service Delivery Area(s) will be identified during the contract period.

C3.1.5 TEMPORARY WORKS

The Contractor shall barricade the work area to prevent any disturbance or damage to the surrounding properties as instructed by the Engineer on site.

The Contractor is to ensure that he obtains the necessary wayleaves and departmental approvals prior to commencing with any work within the road reserves or on public property.

C3.2 ENGINEERING

C3.2.1 DESIGN

The activity schedule and responsibilities are:

The Engineer in consultation with the Employer will determine the extent of the work required and will issue a works order to the Contractor(s) which outlines the location and type of intervention required.

The Contractor shall assign a Contracts Manager to whom all works orders shall be issued.

The Contractor shall prepare a works programme and agree a completion date for each works order issued. The Engineer may vary the order of the works to suit the Employer's requirements.

The Contractor shall obtain the required wayleaves when appropriate for working in the road reserve.

The Engineer in consultation with the Employer shall determine the need for and design any temporary works which shall be presented to the Contractor.

The Contractor shall prepare and present the asphalt design(s) to the Engineer for acceptance.

The Contractor shall prepare and present the seal design(s) to the Engineer for acceptance unless otherwise instructed by the Employer.

The Engineer shall be responsible for the design and preparation of working drawings for rebuilding of roads unless otherwise agreed.

The Contractor shall maintain as-built records and present same to the Engineer in a prescribed format

In the event of the Employer not awarding the Contract, or the Contractor not being able to carry out the work for any reason, the Employer reserves the right to order the work to be carried out by a suitably qualified Contractor without any right for claim by the defaulting Contractor.

C3.2.3 CONTRACTOR'S DESIGN

The Contractor shall supply the design(s) of the following:

The design of any temporary works i.e. traffic accommodation plans.

The asphalt design(s).

The seal design(s).

C3.2.4 DRAWINGS

The drawings as listed hereunder refer to the work described in this contract and are only for bidding purposes.

All information in possession of the Contractor, required by the Engineer and/or the Engineer's Representative to complete the as-built records/drawings, must be submitted to the Engineer's Representative before a Certificate of Completion can be issued.

TENDER DRAWINGS

Sheet No.	Description	Drawing No.
1	LOCALITY MAP	SH-1160-00-LOC
2	TYPICAL DETAIL: TRAFFIC MANAGEMENT	SH-1160-21-01-TD
3	TYPICAL DETAILS : KERBS	SH-1160-21-02-TD
4	SPEED HUMP DETAIL	SH-1160-21-03-TD
5	ROAD SIGNS ERECTION	SH-1160-21-04-TD

The Drawings prepared by the Engineer for the permanent Works are listed on the table above and attached at the back of this tender document as Annexure B. The Engineer reserves the right to issue amended and/or additional drawings during the Contract.

DESIGN PROCEDURES

Not applicable.

C3.3 PROCUREMENT**C3.3.1 PREFERENTIAL PROCUREMENT**

C3.3.1.1 Requirements

Acceptable bids will be evaluated by using a system that awards points on the basis of 80 points for bid price and 20 points for the BBBEE rating.

C3.3.1.2 Resource standard pertaining to targeted procurement

Contractors are encouraged to practice preferential procurement where goods and services are sought, by using local labour and suppliers

C3.3.2 SUBCONTRACTING

C3.3.2.1 Scope of mandatory subcontract works

The following works will only be done by Sub Contractors as local SMMEs:

Kerb laying and concrete drains.

Cleaning of hydraulic structures.

Clearing and cleaning of road surfaces manually.

Patching works.

Slurry seal by hand.

Crack sealing works.

Finishing and clearing works areas.

C3.3.2.2 Preferred Sub contractors/Suppliers

The Contractor shall be responsible for all work carried out by Sub contractors on his behalf. The Engineer will not liaise directly with any such Sub contractor, nor will he become involved in any problems and/or disputes related to payments, programming, workmanship, etc., unless provided for in the Conditions of Contract. Such problems and/or disputes shall remain the sole concern of the Contractor and his Sub contractors.

C3.3.2.3 Subcontracting procedures

The Engineer may at his discretion, upon receipt of a written and fully motivated application from the Contractor, and where he deems the circumstances so warrant, and provided always that the Contractor has complied fully and in all respects with the provisions of the Contract pertaining to subletting to local Sub contractors or has utilised his best endeavours to comply therewith, authorise in writing that the Contractor may employ local residents with the sole intent of executing on-the-job training of such local residents to suitable levels of skill that will enable the Contractor to sub-let appropriate portions of the Works as specified to such local residents.

Without limiting the generality of application of this sub-clause, circumstances which may be considered by the Engineer to warrant such authorisation include:

- non-receipt of valid or acceptable tenders/quotations from local Sub contractors; or
- serious default or failure by the appointed local Sub contractors.

The Engineer shall not grant such authority in cases where it may be reasonably concluded on the available evidence that the invitation of further tenders/quotations in accordance with the terms of the Contract, is likely to result in the successful completion of the portions of the Works concerned by local Sub contractors.

Should the Contractor, after suitable due endeavour, be unable to identify local residents suitable for and desiring to train as Sub contractors for portions of the Works as specified in clause C3.3.2.1, then the Contractor shall be permitted to undertake the Works in question with his own workforce as provided for in clause C3.3.1.1 above.

The Engineer shall monitor progress achieved with Sub contractor training, and successful completion of this training shall be subject to his approval or instruction. The Contractor shall tender rates for the training of Sub contractors and labour.

C3.3.2.4 Attendance on Sub contractors

The Contractor shall approach the Labour Desk that is established for the purposes of the Contract for assistance and advice regarding conditions of employment, minimum wages, disputes and disciplinary procedures in respect of local Sub contractors.

C3.4 CONSTRUCTION

C3.4.1 WORKS SPECIFICATIONS

C3.4.1.1 Applicable COLTO,1998 Standardized Specifications

The following Standardized Specifications for Road and Bridge works for State Road Authorities 'COLTO' for civil Engineering construction are applicable:

- Section 1100 : DEFINITIONS AND TERMS
- Section 1200 : GENERAL REQUIREMENTS AND PROVISIONS
- Section 1300 : CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS
- Section 1400 : HOUSING, OFFICES AND LABORATORY FOR THE ENGINEER'S SITE PERSONNEL
- Section 1500 : ACCOMMODATION OF TRAFFIC
- Section 1600 : OVERHAUL
- Section 2300 : CONCRETE KERBING
- Section 3300 : MASS EARTHWORKS
- Section 3400 : PAVEMENT LAYERS OF GRAVEL MATERIALS
- Section 3500 : STABILIZATION
- Section 3600 : CRUSHED STONE BASE
- Section 3800 : BREAKING UP EXISTING PAVEMENT LAYERS
- Section 3900 : PATCHING AND REPAIRING EDGE BREAKS
- Section 4100 : PRIME COAT

Section 4200 : ASPHALT BASE AND SURFACING

Section 4400 : SINGLE SEALS
Section 4500 : DOUBLE SEALS
Section 4800 : TREATMENT OF AN EXISTING SURFACE EXHIBITING CERTAIN DEFECTS
Section 5700 : ROAD MARKINGS
Section 8100 : TESTING MATERIALS AND WORKMANSHIP
Section 11000: MISCELLANEOUS ACTIONS

The term "project specification" must be replaced by "scope of works" wherever it appears in these standardized specifications.

C3.4.1.2 Variations and Additions to the COLTO Standardized Specifications

Variations and additions to the following COLTO Standardized Specifications listed in C3.4.1.1 are given in section C3.4.6.

C3.4.2 SITE ESTABLISHMENT

C3.4.2.1 Services and facilities provided by the Employer

(a) Water sources

The responsible water supply authority in the area of the Site is the City of Mbombela, applicable SERVICE DELIVERY AREA or Area Office.

Should the Contractor, in complying with his obligations in terms of sub clause C3.4.2.2(b): Water, wish to utilise such water supply, he shall himself be responsible for making his own arrangements with the responsible water supply authority for the supply of all water that he may require from such reticulation network for construction purposes as well as for domestic consumption.

If so required by the responsible water supply authority, the Contractor shall further be responsible, at his own cost, for making or otherwise providing metered connections to the available services at the positions specified by the water authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available water supply will necessarily be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

All charges as may be levied by the responsible water supply authority in respect of water consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of sub clause C3.4.2.2(b), be deemed to be included in the sums bidded by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities, as well as in the rates bidded by the Contractor for the various other items listed in the Schedule of Quantities which require the consumption of water.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible water authority have been promptly paid in full.

(b) Electricity supply

Should the Contractor, in complying with his obligations in terms of sub clause C3.4.2.2(c): Electricity, wish to avail himself of such supply, he shall, in accordance with the provisions of sub clause C3.4.2.2(c), and at his own cost, be responsible for making his own arrangements with the responsible electricity supply authority for the supply of all electrical power he may require from such reticulation network for construction purposes as well as for domestic consumption.

If so required by the responsible electricity supply authority, the Contractor shall, at his own cost, be responsible for making metered connections to the available services at the positions specified by the electricity supply authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available electrical power supply will necessarily be adequate for the Contractor's purposes nor that its supply is in any way guaranteed.

All charges as may be levied by the responsible electricity supply authority in respect of electrical power consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of sub clause C3.4.2.2(c), be deemed to be included in the sums bid by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities, as well as in the rates bid by the Contractor for the various other items listed in the Schedule of Quantities which require the consumption of electricity.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible electricity supply authority have been promptly paid in full.

(c) Excrement disposal

The responsible sewage disposal authority is the City of Mbombela, SERVICE DELIVERY AREA.

Should the Contractor, in complying with his obligations in terms of sub clause C3.4.2.2(d): Excrement disposal, wish to avail himself of such facility, he shall, in accordance with the provisions of sub clause C3.4.2.2(d), and at his own cost, be responsible for making his own arrangements with the responsible disposal authority, and for making such connections he may require to the available services.

If so required by the responsible sewage disposal authority, the Contractor shall, at his own cost, be responsible for making connections to the available services at the positions specified by the sewage disposal authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated water-borne sewage disposal will necessarily be adequate for the Contractor's purposes nor that its operation is in any way guaranteed.

All charges as may be levied by the responsible sewage disposal authority in respect of the disposal of sewage generated by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of sub clause C3.4.2.2(d), be deemed to be included in the sums bid by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts that may have become due and payable by the Contractor to the responsible sewage disposal authority have been promptly paid in full.

(d) Area for Contractor's site establishment

A specific area in close proximity to, or on the Site of the Works, will be made available by the Employer to the Contractor for the Contractor's site establishment. The specific area for the Contractor's site establishment will be identified to the Contractor by the Engineer and the Contractor shall have sole use of such area, free of charge, for the duration of the Contract. The Contractor shall use this area only for the purposes of erecting his site offices, workshops, stores and other facilities required for the execution of the Contract. The Contractor shall not use the area nor allow it to be used for any purposes not directly associated with the execution of the Contract.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may require in the area, as well as elsewhere on the Site.

Should the Contractor deem the area made available by the Employer to be inadequate or unsuitable for the Contractor's particular needs, then the Contractor shall be at liberty to make his own arrangements with the owners of other sites which he considers are better suited to his needs; provided always that the use by the Contractor of any area other than that made available to him by the Employer shall be subject to the prior written approval of the Engineer, which approval shall not be unreasonably withheld; and provided further that the Contractor shall have no claim against the Employer in respect of any costs incurred by him, either directly or indirectly in consequence of utilising any area other than that made available to him by the Employer, and which costs exceed those costs allowed for by the Contractor in his Bid.

C3.4.2.2 Facilities provided by the Contractor

(a) Facilities for the Engineer

The Contractor shall provide on the Site, for the duration of the Contract and for the exclusive use of the Engineer and/or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in terms of this specification shall constitute grounds for the Engineer to withhold payment of the Contractor's bidden Preliminary and General items until the facility has been provided or restored as the case may be.

Site Office accommodation

Not Required

Site meeting venue

The Contractor shall provide within his own site establishment facilities, a suitably furnished office or other venue capable of comfortably accommodating a minimum of six (6) persons at site meetings. The Engineer shall be allowed free use of such venue for conducting any other meetings concerning the Contract at all reasonable times.

(i) Contract name boards

The Contractor shall provide, erect and maintain one contract name board at such position and location as directed by the Engineer, in accordance with the requirements set out in COLTO (as amended).

The Contractor shall before ordering or manufacturing any such contract name board, obtain the Engineer's written approval in respect of all names and wording to appear on the contract name boards.

(ii) Survey equipment and assistants

Survey equipment

Whenever reasonably required by the Engineer, the Contractor shall, in accordance with the requirements of COLTO (as amended), make available to the Engineer or his representative, the following additional survey equipment:

- 1 upright reading automatic level with tripod;
- 1 metric levelling staff with protective cover bag;
- 6 ranging rods;
- 1 x 100 metre Stilon tape measure;
- 1 ± 2 kg hammer.

Survey assistants

The Contractor shall, in accordance with the requirements of the project specifications of this Contract, make available to the Engineer, two (2) survey assistants upon request by the Engineer.

C3.4.2.3 Permits and wayleaves

The Contractor shall be responsible for obtaining all the wayleaves if/when required under this Contract. No separate item is included in the Schedule of Quantities to compensate the Contractor for all his expenses to obtain the wayleaves. The wayleaves to be obtained by the Contractor consists mainly of the following:

City of Mbombela Water Department
City of Mbombela Electricity Department
City of Mbombela Roads Department
Eskom
Telkom
Silulumanzi
Sasol
SARCC/Spoornet
Gascor
Fibre Suppliers

C3.4.2.4 Features requiring special attention

(a) Site maintenance

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

The Contractor is to arrange his own dump site for excavated materials. This site must first be approved by the Engineer and all dumping costs will be for the Contractors account. This information is given in good faith and will under no circumstances form the basis of a claim from the Contractor for any inaccuracies.

(b) Testing and quality control

(i) Contractor to engage the services of an independent laboratory

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Contract. These results will be taken into consideration by the Engineer in deciding whether the quality of materials utilised and workmanship achieved by the Contractor comply with the requirements of the Specifications. The foregoing shall apply irrespective of whether the specifications indicate that the said testing is to be carried out by the Engineer or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Engineer with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" which is not under the management or control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

(ii) Additional testing required by the Engineer

In addition to the provisions of sub clause C3.4.2.4(b)(i): Contractor to engage services of an independent laboratory, the Engineer shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any such tests, additional to those described in sub clause C3.4.2.4(b)(i), at such times and at such locations in the Works as the Engineer shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Engineer, and copies of the test results shall be promptly submitted to the Engineer.

(iii) Costs of testing

(a) Tests in terms of sub clause C3.4.2.4(b)(i)

The costs of all testing carried out by the independent laboratory in accordance with the requirements of sub clause C3.4.2.4(b)(i), above shall be borne by the Contractor and shall be deemed to be included in the bidded rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms of the Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of sub clause C3.4.2.4(b)(i).

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (e.g. re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

(b) Additional tests required by the Engineer

The costs of any additional tests required by the Engineer in terms of sub clause C3.4.2.4(b)(i): Additional testing required by the Engineer, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Engineer, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

(c) Sub contractors

All matters pertaining to Sub contractors (including Nominated Sub contractors) and the work executed by them shall be dealt with directly between the Engineer and the Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Engineer will not liaise directly with any Sub contractors, nor will he issue instructions concerning the subcontract works directly to any Sub contractor.

All matters arising from the subcontract agreements shall be dealt with directly between the Contractor and the Sub contractors and the Engineer will not become involved.

(d) Access to properties

The Contractor shall organise the work to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work, and except as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to Clause 17.1 of the Conditions of Contract.

If, as a result of restricted road reserve widths and the nature of the work, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.

Notwithstanding the foregoing, the Contractor may, with the prior approval of the Engineer (which approval shall not be unreasonably withheld), make arrangements with and obtain the acceptance of the occupiers of erven and properties to close off part of a street, road, footpath or entrance temporarily, provided that the Contractor duly notifies the occupiers of the intended closure and its probable duration, and reopens the route as punctually as possible. Where possible, such streets, roads, footpaths and entrances shall be made safe and reopened to traffic overnight. Such closure shall not absolve the Contractor of his obligations under the Contract to provide access at all times. Barricades, traffic signs, drums and other safety measures appropriate to the circumstances shall be provided by the Contractor to suit the specific conditions.

(e) Existing residential areas

Electricity and water supply interruptions in existing residential areas shall be kept to a minimum. The Engineer's approval shall be obtained prior to such interruptions and residents shall be notified in writing at least 24 hours but not more than 48 hours in advance. Supplies shall be normalised by 16:00 on the same day.

(f) Monthly statements and payment certificates

The statements to be submitted by the Contractor in terms of Clause 49 of the Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Engineer, in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two (2) A4 size paper copies of the statement.

For the purposes of the Contractor's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustments to his statement as may be required by the Engineer for the purposes of accurately reflecting the actual quantities and amounts which the Engineer deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Engineer within three (3) normal working days from the date on which the Engineer communicated to the Contractor the adjustments required. The Contractor shall submit to the Engineer five (5) sets of A4 size paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Engineer the requisite copies of the adjusted statement for the purposes of the Contractor's payment certificate will be added to the times allowed to the Engineer in terms of Sub clause 49.4 of the Conditions of Contract to submit the signed payment certificate to the Employer. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

(g) Construction in restricted areas

Working space in areas may be restricted. The construction method used in these restricted areas largely depends on the Contractor's Plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices bid will be deemed to include full compensation for any difficulties encountered by the Contractor while working in restricted areas. Neither extra payment nor any claim for payment due to these difficulties will be considered unless otherwise scheduled.

(h) Notices, signs, barricades and advertisements

All notices, signs and barricades, as well as advertisements, may be used only if approved by the Engineer. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his bid rates.

The Engineer shall have the right to instruct the Contractor to move any sign, notice or advertisement to another position, or to remove it from the Site of the Works if in his opinion it is unsatisfactory, inconvenient or dangerous.

(i) Workmanship and quality control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced Engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing carried out by the Contractor, will be deemed to be included in the rates bid for the related items of work.

The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of testing required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Engineer for examination and measurement, the Contractor shall furnish the Engineer with the results of the relevant tests, measurements and levels to demonstrate the achievement of compliance with the Specifications.

C3.4.2.5 Extension of time due to abnormal rainfall

The contract is for a fixed duration and is not subject to extension of time in accordance with Clause 42 of the General Conditions of Contract.

The Contractor shall keep accurate records of all occurrences which may be cause for delay in completing works orders to substantiate late completion of same. The Contractor shall not be entitled to payment of any time-related charges as contemplated in clause 42.4.

C3.4.3 PLANT AND MATERIALS

C3.4.3.1 Plant and materials supplied by the Employer

The Employer shall not supply any plant or materials.

C3.4.3.2 Materials, samples and shop drawings

Samples

Materials or works which do not conform to the approved samples submitted in terms of Sub clause 23.4 of the Conditions of Contract will be rejected. The Engineer reserves the right to submit samples to tests to ensure that the material represented by the sample meets the specification requirements.

The costs of any such tests conducted by or on behalf of the Engineer, the results of which indicate that the samples provided by the Contractor do not conform to the requirements of the Contract, shall, in accordance with the provisions of Sub clause 23.7 of the Conditions of Contract, be for the Contractor's account.

C3.4.4 CONSTRUCTION EQUIPMENT

C3.4.4.1 Requirements for equipment

The Contractor is to provide equipment as necessary to successfully complete the works as issued under the letter of acceptance and letters of instruction to proceed as detailed in the document.

C3.4.4.2 Equipment provided by the Employer

The Employer shall not supply any equipment.

C3.4.5 EXISTING SERVICES

C3.4.5.1 Known services

The Contractor should consult the relevant municipal departments in order to obtain information as to the location of known services. There are no guarantees provided as to accuracy of information provided by relevant services providers and the Contractor accepts the risk associated therewith.

C3.4.5.2 Treatment of existing services

The location, protection and relocation of existing services form an integral part of this contract.

No guarantee as to the accuracy of the information can be given and the responsibility lies with the Contractor to determine the exact positions of all existing services.

Before any work can commence, the Contractor shall contact all private or public authorities controlling services so that they may either protect, move or relocate any services as required, or confirm that all such work has been completed.

C3.4.5.3 Use of detection equipment for the location of underground services

It is recommended that the Contractor use detection equipment for the location of underground services.

C3.4.5.4 Damage to services

Any damage of these services as a result of acts by the Contractor, his Sub contractors or their respective employees, shall be repaired at the Contractor's expense.

C3.4.5.5 Reinstatement of services and structures damaged during construction

Wherever, for the proper construction of the works, any telephone or electricity line or poles, or any water supply pipes, conduits electric cables, sewers, drains or any other services are required to be removed or relocated, or where any of these services requires to be repaired as a result of damage by the Contractor or otherwise, the Contractor shall immediately advise the Engineer thereof, and further notify the responsible authorities concerned in order that such work as is necessary be undertaken by such authorities. The Engineer will also decide the extent of work, if any to be undertaken by the Contractor in removing, relocating or repairing such services.

C3.4.6 VARIATIONS & ADDITIONS TO COLTO STANDARDIZED SPECIFICATIONS

SECTION 1100: DEFINITIONS AND TERMS

B1115 General Conditions of Contract

Replace the contents of this clause with the following:

"The General Conditions of Contract for Works of Civil Engineering Construction, 2nd Edition (2010), issued by the South African Institution of Civil Engineers, together with the Special Conditions of Contract forming part of this contract."

B1155 Construction in restricted areas

Replace the contents of this clause with the following:

Working space areas may be restricted. The construction method used in these restricted areas largely depends on the Contractor's Plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices bid will be deemed to include full compensation for any difficulties encountered by the Contractor while working in restricted areas. Neither extra payment nor any claim for payment due to these difficulties will be considered unless otherwise scheduled or specified.

B1156 Correction course

Add the following:

One or more layers of asphalt of varying thickness, having a specified minimum total thickness, which is applied to improve the riding quality of the road so that it will meet specified standards and requirements. A correction course is a type of overlay.

SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS**B1201** Scope

Add the following:

“This section also covers matters which relates to the location of existing services by the Contractor.”

B1204 Programme of Work

Add the following sub clause:

(a) Programme for work orders and revisions

The duration of the contract is from date of acceptance by the City of Mbombela to 30 June 2027. The Contractor shall prepare a programme upon issue of the first work order(s). The programme shall be amended upon receiving additional work orders showing the completion date of each order. The programme will be reviewed at the monthly site meetings at which the Contractor shall provide sufficient detail that will allow the comparison of completed work per activity against the original approved programme. The Contractor shall indicate what resources and programme changes he intends to implement in order to remedy any activity that has fallen behind. The Engineer may demand from the Contractor a major revision of the programme which shall be submitted for approval within fourteen days of the demand.

B1210 Certificate of practical completion of the works

Delete the clause and replace with:

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

In addition to the listed specified items of work and regardless of the degree of beneficial occupation by the Employer, the works shall be considered for practical completion as follows:

- (i) Sections of the works completed will be inspected and taken over at intervals of 6 months.
- (ii) The Contractor shall submit a written request stipulating the sections of work completed and ready for inspection.
- (iii) Any information in the Contractor's possession, which is required by the Engineer and has been requested in writing, has been supplied.

B1214 Contractor's activities in respect of property outside the road reserve and of services moved, damaged or altered

Under sub clause (e) replace the opening paragraph with:

"Should the Contractor use land not provided by the Employer for the purpose of his own establishment, Engineer's offices and laboratory, or storing of equipment or materials required for construction or disposal, it shall be subject to the following:"

and add the following sub-sub clauses:

- (iv) "That lease agreements are concluded with the owner or owners of such land for the full period that such areas are required. The leases shall provide for possible extensions to match the duration of the contract. The lease agreements shall also provide for the contract being terminated by Contractor's default or liquidation and the resulting possibility for them to be taken over by a succeeding Contractor.
- (v) "That copies of lease agreements shall be submitted to the Engineer prior to signature by the signing parties, and copies lodged with the Engineer after signing. Notwithstanding the Engineer's approval of the conditions of a lease, the Contractor shall be solely responsible for adherence to the terms of the agreements."
- (vi) Adherence to the principles of the environmental management plan and legal obligations".

B1229 SABS Cement Specifications

Add the following to this clause:

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

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

On this contract CEM I 42.5 shall be used."

Cement Grade	Cement Type	Approximate old product name	New Alpha	New Blue Circle	New NPC	New PPC	New Slagment
52.5	CEM I	Rapid hardening	Rapid Hard	Duracast	Eagle Super	-	-
42.5R	CEM I	Rapid hardening	-	-	-	Rapo	-
	CEM I	OPC*	Portland cement	Duratech	-	OPC	-
	CEM I	LASRC	-	-	-	LASRC	-
	CEM II A-S	PC 15SL	-	-	Eagle Plus	-	-
	CEM II B-S	RH30SL	-	-	Eagle Plus	-	-
32.5R	-	-	-	-	-	-	-

Cement Grade	Cement Type	Approximate old product name	New Alpha	New Blue Circle	New NPC	New PPC	New Slagment
32.5	CEM II A-V	PC 15FA	All Purpose Cement	-	-	Surebuild	-
	CEM II A-W	PC15FA	-	-	-	Surebuild	-
	CEM II A-L	-	All purpose Cement	-	-	Surebuild	-
	CEM II B-V or W	PC25FA/PFAC**	-	Structrete	-	Surecrete	-
	CEM IIIA	PBFC	-	BFC	Eagle Pro	-	PBFC
	CEM IIIA	RHSL	-	-	-	-	RHSL
22.5	MC 22.5X	PFAC***	Multi-Purpose Cement	Durabuild	-	-	-
	MC22.5X	PFAC***	-	Buildcrete	-	-	-
12.5	MC 12.5	Wallcrete	Mortar Cement	Wallcrete	-	Masonry	-
	MC 12.5	Mortacem	-	-	-	-	-

Notes: * OPC cements previously performed approximately as CEM 1 32,5R products

** PC25FA cements under the old standards achieved lower compressive strengths than the OPC's of the time

*** Some PFAC cements meet the new standard for MC 22,5X. Others required modification before meeting the requirements for MC 22,5X

B1230 Construction vehicles & equipment

The Contractor is to provide equipment as necessary to successfully complete the works as issued under the letter of acceptance and letters of instruction to proceed as detailed in the document.

All construction vehicles and equipment must be roadworthy since movement on public roads is required. All vehicles and equipment must be equipped with flashing lights on the cabs and warning sign "Construction Vehicle"

All costs in regard to the above must be allowed for in the General Requirements.

B1231 Safety of personnel and work

The Contractor is fully responsible for the safety of his personnel. All personnel are required to wear visible warning type clothing when on site.

All costs in regard to the above must be allowed for in the General Requirements.

SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE & GENERAL REQUIREMENTS**B1301 Scope**

Add the following at the end of the last sentence (delete the full stop):

“and application of the Workmen’s Compensation Act.”

B1301 General requirements

Add the following new sub clauses:

“(d) Contractors ablution facilities

The Contractor shall, at each construction area, provide sufficient portable chemical latrine units. Furthermore, the Contractor shall provide a portable chemical toilet at each temporary traffic control facility. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the approval of the Engineer. No separate payment shall be made for this requirement and the costs thereof shall be deemed to be included in the rates tendered for the Contractor’s establishment on site.”

“(e) Safety of the Contractor’s workforce and Sub contractors

The Contractor is responsible for the safety of his workforce and for the safety of the Sub contractors.”

B1301 MEASUREMENT & PAYMENT

Payment of the lump sum tendered under Item B13.01 shall include full compensation for all administrative costs and incidentals in respect of compliance with and enforcement of these Health and Safety specifications, which shall include for the compilation, presentation, implementation and maintenance of the site Health and Safety plan as contemplated in regulation 5 of the Construction Regulations.

Payment of the lump sum tendered will be 15% of work issued.

SECTION 1500: ACCOMMODATION OF TRAFFIC**B1502 General requirements**

Add the following sub clauses:

“(j) Handing over of site

The road reserves of all roads to be treated in terms of this agreement shall be handed over to the Contractor on the commencement of actual work on the street. The Contractor must ensure that a free and safe flow of traffic is maintained and that access to properties is ensured at all times and that the requirements of the specifications are complied with.

The Contractor must also liaise with the Traffic Department of the City in order to ascertain its requirements relating to the engagement of traffic and to apply during the Contract. When the physical work on the street is completed and safe, the relevant portion of road shall be handed over to the Employer. These arrangements must be recorded on a daily basis in the site diary.”

B1517 MEASUREMENT & PAYMENT

Substitute item 15.01 with the following:

ITEM	UNIT
------	------

B15.01	Accommodation of traffic and maintenance of deviations	km
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during the execution of the works,

The Contractor shall present to the Engineer a traffic accommodation plan for each and every section/site location for his acceptance. The lump sum tendered include full remuneration for the general duties, safety precautions, sign boards and other cost items necessary for the accommodation of traffic to the satisfaction of the Engineer. It also includes full remuneration for the provision of flagmen, temporary road signs, complying with the legal requirements of all relevant authorities and maintaining temporary access to private property as well as the issue of Notices.

SECTION 1600: OVERHAUL

B1602	Definitions
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(a) Overhaul material

Add to the first paragraph "No overhaul is payable for material obtained from commercial sources"

(b) Overhaul

Delete the second paragraph and replace with "Restricted overhaul is not applicable to this contact."

Replace "1.0km" in the second paragraph with "5.0km"

Replace the fourth paragraph to read "Ordinary overhaul shall be paid in respect of material hauled in excess of 5.0km to and from sites approved by the Engineer. Overhaul shall not be payable for material loads of less than 3 m³ loose volume"

SECTION 1700: CLEARING AND GRUBBING

B1702	General Requirements
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Add the following:

"(e) Cleaning of roads prior to Repair and Resurfacing

All silt, debris and rubble shall be removed from the road surface and road reserve as instructed by the Engineer. The Contractor shall provide suitable equipment such as graders and Smooth Drum Vibratory Rollers as he deems fit to clean the roads to an acceptable condition. Where hand labour is required, the Contractor shall make use of local labour. In some cases, the silt deposits are caked firmly onto the road surface. The material removed shall be loaded and carted to spoil.

Cleaning of roads by brooming will be considered as being part of the normal road resurfacing process and deemed to be included in the unit rates.

The time required to clean a particular street shall be agreed between the Contractor and Engineer before commencing with the work. Only the agreed and approved time will be measured for payment.

(f) Cleaning of Drainage Structures

The contract also includes for the cleaning out of the existing culvert inlets, outlets and culvert barrels of debris, soil, silt and other materials.

The actual work required of the Contractor shall be determined on site and a site instruction will specify the extent of the work required. Payment shall be made under item B17.07.

The excavations required for the removal of soil, silt and other debris from the inlets, outlets and culvert barrels, will be carried out by hand and any damage to the existing drainage structures caused as a result of the negligence of the Contractor, shall be repaired at his own expense.”

B1704 MEASUREMENT & PAYMENT

Add the following items:

“ITEM UNIT

B17.07 Clearing and Cleaning of Surfaced Roads using:

Manual labour (6-man team) plus tools hour

(e) 6m³ Tipper truck hour

The unit of measurement shall be the hour that the plant or labour actually works on site on the instruction of and certified by the Engineer.

The tendered rate for labour should include full compensation for overhead charges and profit, site supervision, insurances, paid holidays and the use and maintenance of tools and equipment. The time of General Foreman, Walking Gangers and Inspectors shall be covered by superintendence.

ITEM UNIT

B17.08 Dump site charges for spoil of all excavated material at m³

a suitable dump site identified by the Contractor

The unit of measurement shall be per cubic metre of material excavated and spoiled under Sections 1700, 3800 and 3900. The rate shall be inclusive of dump site costs, loading, off-loading and labour. Overhaul shall be paid under section 1600 and shall only apply to loads in excess of 3m³ hauled outside a radius of 5km, for smaller loads or dump site located closer than 5km the rate shall include overhaul. Payment for this item will only be made for spoiling at a site approved by the Engineer and the Contractor shall provide documentary proof i.e. “a dump site invoice” to substantiate his claim.

It remains the responsibility of the Contractor to identify a suitable dump site which must be approved, in writing, by the Engineer.

A penalty of R1000/m³ will be charged for any illegal dumping of material and/or dumping of material to sites not approved by the Engineer.”

ITEM UNIT

B17.09 Tree pruning & removal of cuttings as generated per day

Pruning of roadside branches to accommodate equipment and plant.

The rate provided to include for all costs for a pruning team, truck and disposal costs.

Cutting/pruning of trees will be limited to branches that are obstructing equipment or trucks. Trees should be pruned in such a way that it stays in balance. Cuts must be neatly against stems. Branches must be professionally pruned. No unsightly and unnecessary bark tears will be permitted.

All pruned tree branches to be removed from site on the same day and be disposed of in a legal and responsible manner by the Contractor. Dumping on private property will not be tolerated.

Where the branches that must be cut are within 3 meters from overhead power lines, the Parks and Electricity departments must be contacted.

SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

B3401 MATERIALS

(a) General

Add to the first sentence:

“... or from commercial sources or the Contractor’s own sources when so specifically described in the payment item(s).”

The unit of measurement shall be the number of establishments of a specific team on site and the number shall be measured as one complete establishment if establishment on site was to the satisfaction of the Engineer, removal/de-establishment of such team at the completion of the works. No plant shall be de-established without the approval of the Engineer.

SECTION 3800: BREAKING UP EXISTING PAVEMENT LAYERS

B3807 MEASUREMENT & PAYMENT

ITEM

B38.01; 38.02 and 38.04

Substitute “free-haul distance of 1,0km” with “free-haul distance of 5.0km”. Overhaul shall be paid under section 1600 and shall only apply to loads in excess of 3m³ hauled outside a radius of 5km, for smaller loads or dump site located closer than 5km the rate shall include overhaul. Payment for dumping costs are payable under item B17.08.

ITEM

B38.15 Moving of milling machine on the site

Substitute “distance of 1,0km” with “distance of 5.0km”.

ITEM

B38.02 Milling of existing bituminous material with an average depth of:

Add to payment item:

“The tendered tariffs must make provision for the milling of bituminous materials and pavement layers, irrespective of the type or compressive strength of the material.”

Replace “stockpile” with

“stockpile or to approved spoil site”

SECTION 3900: PATCHING AND REPAIRING EDGE BREAKS

B3904 Patching

(c) Excavating pavement material:

Add the following:

Only the existing surfacing may be removed for the excavation unless otherwise instructed by the Engineer. Excavated material must be removed on the same day on which it is excavated and spoiled to the approved spoil site.”

(d) Backfilling excavations

Add the following:

“The backfilling of excavations must be done in layers. Every layer must be compacted before placing the next layer. The maximum layer thicknesses allowed for patching are:

Gravel 75mm/layer

Crushed stone 75mm/layer

Asphalt base coarse (26.5mm aggregate) 50mm/layer

Asphalt surfacing 25 - 30mm/layer

B3907 MEASUREMENT & PAYMENT

ITEM

B39.02; 39.03 and 39.05

Substitute “free-haul distance of 1,0km” with “free-haul distance of 5.0km”. Overhaul shall be paid under section 1600 and shall only apply to loads in excess of 3m³ hauled outside a radius of 5km, for smaller loads or dump site located closer than 5km the rate shall include overhaul. Payment for dumping costs are payable under item B17.08.

ITEM

B39.02 Excavation in existing pavement for patching.

Replace (a), (b) and (c) with:

All types of material.

“No distinction will be made for different types of material; rates include all types of materials. The rate bid shall be inclusive for excavation in all types of materials i.e. asphalt, bituminous seals and overlays, cemented gravel layers, crushed stone layers etc.”

SECTION 4200: ASPHALT BASE AND SURFACING**B4202 Materials**

- (a) Bituminous binders
- (i) Conventional binders

Add the following

“The binders to be used shall be as follows

- a) Continuously graded surfacing course: 60/70-penetration grade bitumen
- b) Continuously graded base: 40/50-penetration grade bitumen
- (ii) Non-homogeneous (heterogeneous) modified binders”

Replace the last sentence with the following:

“The bitumen-rubber binder shall be manufactured according to the guidelines contained in “Technical Guideline: The use of Modified Bituminous Binders in Road Construction (TG 1-2001) Asphalt Academy”

(2) Rubber

Delete table 4202/1 in the last sentence and replace with “table B4202/1”

Table B4202/1 - Requirements for Rubber Crumbs

Sieve Analysis		Test Method
Sieve size (mm)	% Passing by mass	
1,18	100	MB-4(*1)
0.600	40-70	
0,075	0-5	
Other requirements	Limits	Test Method
Natural rubber hydrocarbon content (%)	30 min	BS 903 Parts B11 & B12
Fibre length (mm)	6 max	
Bulk Density (gm/cm3)	1,10 – 1,25	MB 16

(3) Extended Oil

Delete table 4202/2 in the first sentence and replace with “table B4202/2”

Table B4202/2 - Requirements for Extender Oil

Property	Limits
Flash Point	180oC (min)
Percentage by mass of saturated hydrocarbons	25% (max)
Percentage by mass of aromatic unsaturated hydrocarbons	55% (min)

(4) Bitumen rubber blend

Delete table 4202/3 in the second paragraph and replace with “table B4202/3”

Table B4202/3 - Bitumen-Rubber Compositional and Blending Limits

Property	Limits
Percentage of rubber by mass of total blend	20-24
Percentage of extender oil by mass of total blend	4(max)
Percentage of diluent/cutter by mass of total blend	5 (max) (*1)
Blending/reaction temperature	170oC – 210oC
Reaction time (reaction time commences when all the rubber crumbs have been added to the blend)	0,5 – 4,0 hours (*2)

Delete table 4202/4 in the second last paragraph and replace with “table B4202/4”:

Table B4202/4 - Properties of Bitumen-Rubber for use in Asphalt

Property	Unit	Test Method	Binder Class	
Compression Recovery: 5 minutes	%	MB-11	80	100
Compression recovery: 1 hour	%	MB-11	70	95
Softening point (R&B)	oC	MB-17	55	65
Resilience	%	MB-10	13	35
Flow	Mm	MB-12	10	50
Dynamic Visc. (Haake @ 190oC)	DPa.s	MB-13	20	50

(c) Aggregates

Add the following paragraph to the introductory description:

“Asphalt mixes shall be manufactured using different individual single size coarse aggregates fractions and crushed fine aggregates blended to conform to the specified grading requirements. The use of natural sands shall only be permitted if approved by the Engineer and shall be limited to a maximum of 5% for continuously graded mixes. All aggregate in excess of 4,75 mm shall consist of individual nominal single sized aggregate”

(v) Absorption

Add the following sentence

“In addition, the total binder absorption of the combined coarse and fine aggregate blend shall not exceed 0,5%”

(viii) Grading

Delete the second paragraph commencing with "The target grading..." and add the following paragraphs

“The grading limits for the combined aggregate grading for the asphalt base shall be as specified in table 4202/6: Continuously graded 26,5mm maximum.

The grading limits for the combined aggregate grading for the asphalt surfacing shall be as specified in table 4202/7: Continuously graded medium grade.

(h) General

Add the following after the second paragraph:

“Sufficient aggregate for a minimum of 3 days’ production shall be separately stockpiled and tested for conformance and uniformity prior to use. The test results shall be presented to the Engineer”

B4203 Composition of Asphalt base and surfacing mixtures

In the first paragraph, third last line, after “or active filler content” add:

“or aggregate content”

Replace the fifth paragraph with the following:

“The design of the asphalt mixes shall be in accordance with “Interim Guidelines For The Design Of Hot-Mix Asphalt In South Africa (June 2001)”, and appropriate research results. The mix properties and requirements shall be as specified in the project specifications”

The relevant asphalt mixes for the base and surfacing layers shall comply with the requirements in table B4203/2.

Table B4203/2 - Asphalt mix requirements: Base and Surfacing

Property	Continuously graded base mixes	Continuously graded surfacing mixes
Marshall Stability (kn)	8 – 18	8 – 18
Marshall Flow (mm)	2 – 6	2 – 6
Stability /Flow (kN/mm)	>2,5	> 2,5
VMA (%)	> 14	> 15
VFB (%)	65 – 75	65 – 75
Air voids (%)	4 – 6	4 – 6
Indirect tensile strength @ 25oc (kPa)	> 1000	> 1000
Dynamic Creep Modules @ 40oC (MPa)	> 20	> 20
Modified Lottmann* (TSR)	> 0,7	> 0, 8
Air permeability @ 7% voids (cm2)	< 1 x 10 –8	< 1 x 10 –8
Binder film thickness (microns)	5,5 – 8,0	5,5 – 8,0
Filler bitumen ratio	1 – 1,5	1 – 1,5

B4205 General Limitations and requirements and the stockpiling of mixed material

(c) Surface Requirements

(iii) Tack Coat

Add the following paragraph:

“Hand spraying shall only be permitted on areas approved by the Engineer. The binder distributor shall be capable to apply the binder evenly over the full area. The equipment shall comply with clause 4103. Tack coat shall be applied to all transverse and longitudinal joints by hand utilizing a paint brush.”

B4206 Producing and transporting the mixture

(b) Production of the mixture

(ii) Using drum-type mixer plants:

Add the following:

“Pre blending of aggregate fractions shall not be permitted and the Contractor shall ensure that sufficient cold-feed bins are installed to accommodate each individual aggregate fraction, including the filler.”

(c) Transporting the mixture

Add the following paragraph:

“Special precautions shall be taken by the Contractor to ensure that the temperature of the total mass of asphalt does not decrease by more than 10oC from point of dispatch to the point where it is to be paved. The use of the thermal blankets is obligatory.

The Contractor shall ensure that trucks used to haul asphalt are not overloaded and the legal axle loads are not exceeded. Before any asphalt can be transported, the Contractor must provide the Engineer with the certified carrying capacity of each truck intended for the purpose of transporting the mix. The Contractor shall provide the Engineer with a weighbridge ticket before discharging into the paver hopper.

ANY truck that is overloaded shall not be allowed to discharge its load and shall return to the depot/batching plant for adjustment of the load.”

Add the following sub clause:

“(f) Approval of asphalt mixture

Before any asphalt is placed on the road, the Engineer shall approve the mix design. The approval process shall be as follows:

The Contractor shall prepare and submit a laboratory design mix with test results at four different bitumen contents. The design mix shall be submitted on the prescribed form D3 of TMH 10: “Instruction for the Completion of As-Built Materials Data Sheets” with all the necessary test results completed. In addition, the proposed asphalt mixture shall be subjected to gyratory testing. All the expenses in preparing and submitting the laboratory design mix shall be to the Contractor’s cost.

Samples of all aggregate and bitumen shall be submitted with the laboratory design mix to enable the Engineer to carry out check design testing as necessary. The above design and aggregate shall be submitted to the Engineer at least six weeks before it is intended to commence with any asphalt production.

After approval is obtained for the laboratory design mix, a plant mix at varying binder contents of approximately 5 to 10 tons each shall be produced. The purpose of the plant mix is for the Contractor to prove that the laboratory design mix can be produced successfully. The Engineer shall conduct the necessary testing on the plant mix. The plant mix shall not be placed on the road. During the production of the plant mix, the Engineer shall be afforded the opportunity to inspect the asphalt plant.

After the plant mix is approved, permission shall be given for laying a trial section at varying binder contents in accordance with the requirements of section 4211 of the specifications. The Engineer may require that the mix be further assessed by means of CSIR Wheel Tracking or MMLS testing, the cost of which will be borne by the Employer. Mass production of asphalt shall only commence after approval of the trial section, which should be given within a maximum of ten days.

The Engineer may instruct the Contractor at any time to halt his paving process and to review the whole or part of the above process should a change of aggregate properties occur, the specified asphalt requirements not being met and/or a consistent asphalt mixture not be produced.”

B4208 Joints

Add the following to this clause:

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

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

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

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

B4209 Pre-coated chippings for Asphalt surfacing

In the first sentence of the fifth paragraph, delete 6-8 kg/m² and 7-9kg/m² respectively and replace with:

“3-4 kg/m² and 5-6 kg/m²”

In the last sentence of the fifth paragraph, delete “between 0,6 and 1,0 mm” and replace with:

“between 0,8 and 1,2mm”

B4214 Quality of workmanship and material

(b) Coring of asphalt layers

Add the following:

“A suitable coring machine shall be available on a daily basis when asphalt paving is taking place. Cores shall only be drilled, when the road temperature is 20oC or less. Core holes shall be filled with hot mix asphalt and compacted, all within 24 hours of the core being drilled. Coring shall be carried out within 48 hours after the paving has been completed and supplied to the Engineer. The test results of cores shall be submitted to the Engineer within 24 hours after coring.”

(c) Routine inspection and tests

Add the following paragraph:

“The Contractor shall keep accurate records of:

- (i) The position where every truckload of asphalt is paved (street name, chainage, lane, time and date).
- (ii) The temperatures of the asphalt in the trucks both at the mixing plant and at the paving equipment immediately prior to discharging the load.
- (iv) The truck and load number from which control samples are taken. All samples taken shall be appropriately numbered.”

Add the following sub clause:

(a) Special tests

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

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

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

SECTION B4300: SEALS: MATERIALS AND GENERAL REQUIREMENTS

B4302 Materials

Add the following to the first paragraph:

“Any tests referred to in the publication Technical Guideline “Use of Modified Bituminous Binders in Road Construction, October 2001, Asphalt Academy”, shall supersede those specified in the Colto Standard Specifications for Road and Bridge Works 1998. This document is available from the Asphalt Academy.”

- (a) Bituminous binders
- (ii) Non-homogeneous (heterogeneous) modified binders (summer grade)
- (4) Diluent

Add the following sentence:

“The addition of a diluent or cutter to the blend shall not be permitted unless approved by the Engineer.”

(5) Bitumen-rubber blend

Replace table 4302/3 in the first paragraph and table 4302/4 in the fourth paragraph respectively with:

“table B4302/3 and table B4302/4”

In the fourth paragraph, add the following after the word “requirements”:

“for binder class S-R1”

Table B4302/3 - Bitumen-Rubber Compositional and Blending Limits

Property	Limits
Percentage of rubber by mass of total blend	20 – 24
Percentage of extender oil by mass of total blend	4 (max)
Percentage of diluent/cutter by mass of total blend	5 (max) (*1)
Blending /reaction temperature	170oC – 210oC
Reaction time (reaction time commences when all the rubber crumbs have been added to the blend)	0,5 - 4,0 hours (*2)

* Note

- 1) The addition of a diluent is not recommended in bitumen-rubber for use in hot-mix asphalt applications.
- 2) The reaction time for the product is highly influenced by the composition of the base bitumen and the particle size of the rubber crumbs, and it may remain acceptable for up to 6 hours.

Table B4302/4 - Properties of Bitumen-Rubber for use in Surface Seals and Asphalt

Property	Unit	Test Method	Binder Class			
			S-R 1 (Seal)		A-R 1 (Asphalt)	
			Min	Max	Min	Max
Compressions Recovery: 5 minutes	%	MB-11	70	-	80	100
Compression recovery: 1 hour	%	MB-11	70	-	70	95
Compression recovery:4 days	%	MB-11	25	45	25	55
Softening Point (R&B)	oC	MB-17	55	62	55	65
Resilience	%	MB-10	13	35	13	35
Flow	mm	MB-12	15	70	10	50
Dynamic Visc. (Haake @ 190oC)	DPa.s	MB-13	20	40	20	50

(b) Aggregates

(i) Aggregates for seals

Add the following at the end of the sentence:

“and durability.”

(1) Grading

Add the following:

“Only Grade 1 aggregate shall be used for the construction of seals on this project.”

(3) Shape

Add Table B4302/13 and the following paragraph:

“Ninety-five (95%) percent of the particles shall have at least three fractured faces. The Average Least Dimension (ALD) of the relevant nominal aggregate sizes shall comply with the requirements of Table B 4302/13.”

Table B4302/13 - Minimum ALD Requirements

Nominal Aggregate Size (mm)	Minimum ALD (mm)
19,0	12,0
13,2	8,0
9,5	5,5

Add the following subsubclause:

“(4) Durability

Aggregate used in seals and asphalt shall show a breakdown of less than 2% as determined by the test method specified in Clause B8105 paragraph (g).”

(ii) Aggregate for slurry seals

In the first paragraph, add the following after the first sentence:

“The Engineer may order the addition of an approved natural sand or additional cement to improve either the permeability or workability of the slurry.”

Add the following subclause:

“(iii) Aggregate for blinding

The aggregate used for blinding the single seal shall consist of 2,00 mm to 4,75 mm crushed aggregate or river sand. The aggregate shall be clean, hard and free from clay, silt or other deleterious matter.”

(d) Hydrophilic aggregates

(i) Precoating of aggregate for stockpiling or for immediate use:

In the fourth paragraph, delete “12 litre” in the second sentence, and add the following new sentence:

“Precoating fluid shall be manufactured from petroleum based products. The use of tar based precoating fluids will not be permitted. For tender purposes the nominal quantity of precoating fluid for the relevant nominal aggregate sizes is specified in table B4302/14.”

Table B4302/14 - Nominal Application Rates for Precoating Fluid

Nominal aggregate size (mm)	Nominal precoating application rate (l/m ³)
19,0	12
13,2	16
9,5	19
6,7	22

Add the following sub clauses:

“(e) Water for diluting emulsions

Water used for the dilution of emulsions on site shall be suitable potable water, and each source of water used shall be tested for compatibility with the emulsion before it is added to the bulk emulsion.

(f) Testing of polymer modified bitumen/emulsion

Testing shall be in accordance with the methods described in "Technical Guideline: The use of Modified Bituminous Binder in Road Construction TGI (October 2001)."

During spraying of each batch, the Contractor shall draw off at least three test samples of the modified bitumen/emulsion product and submit them to the Engineer for acceptance testing purposes. The supplier shall submit all his tests results to the Engineer for correlation purposes, failing which the Engineer's results shall be binding in terms of acceptance or rejection of the product."

B4303 Plant and equipment

(b) Binder distributor

Add the following:

" Prior to the commencement of any work, a calibration certificate, not older than 12 months, for the binder distributor shall be presented to the Engineer for approval.

The binder distributor shall be capable of spraying the binder at the type being applied and shall be as follows:

Emulsions, cutback and penetration grade bitumen - 5%

Homogeneous modified bitumen - 7%

Non- homogeneous binders (bitumen rubber) - 10%

The spray bar shall be of such design as to allow for any adjustments to be made in order to meet the above tolerances. This procedure shall be carried out each time the distributor is first established on site and once a week thereafter or when a problem with transverse distribution is suspected. The binder distributor shall thus have a set of specified application rates and to the satisfaction of the Engineer. The pump of the distributor shall be capable of delivering the binder at the spray bar nozzles at the correct pressure to obtain the specified application rates, irrespective of the viscosity properties of the prescribed binder. The spray bar of the distributor shall be fitted with fishplates at the outside edge of the bar to prevent over spraying onto gravel shoulders or staining of concrete elements on the edge of the surfacing of the road

In addition, the transverse distribution of the spray bar shall be field verified by means of the "Bakkie" test as described in B 8117. The maximum permissible tolerance permitted between the troughs (excluding the outer 300mm) is dependent on the viscosity of the binder troughs available in order to allow the execution of the test. For limited quantities of spray-work, the Engineer may accept the results of a recently completed distribution test that has been recorded and approved by an independent supervisor on the distributor's test log book.

The binder distributor shall be fitted with a suitable valve or other access gate for taking of samples of the binder for testing purposes."

(c) Chip spreaders

Add the following at the end of the first paragraph:

"The chip spreader shall be capable of delivering a proper and uniform transverse distribution of chips across the conveyor belts. The chip distribution shall be tested by means of canvas patches, each 1,0m by 1,0m and placed side by side. The mass of chips spread onto each individual canvas patch shall not deviate by more than 10% from the calculated average spread per canvas patch."

Add the following to the last paragraph:

"A non-self-propelled chip spreader may only be used in the event of a breakdown of the self-propelled chip spreader during a pull, and shall be limited to the completion of that pull. No further application of binder shall be permitted until such time as the self-propelled chip spreader is repaired or replaced."

B4304 General limitations & requirements

(d) Preparation of areas to be sealed

(i) General

Add the following:

"Seal work shall not be permitted on granular base layers if the moisture content in the upper 50mm exceeds 50% of the optimum moisture content, determined in accordance with TMH1 Method A7. This limitation shall apply even if the layer has been previously primed.

Sealing work shall not commence until the Engineer has approved all other works ordered on that section of road."

B4305 Heating and storage of bituminous binders

(b) Non-homogeneous (heterogeneous) modified binders (summer grade)

Replace the entire sub clause with:

" After completion of the bitumen-rubber reaction, the handling of the binder shall comply with the requirements listed in table B4305/4. The binder may only be stored in tanks with circulation systems.

The Engineer's supervisory staff shall, through timeous notification by the Contractor, be afforded the opportunity to attend all bitumen rubber-blending operations in order to exercise control sampling and testing of the binder from the stage just prior to the addition of the rubber to the base bitumen up to the end of the allowable spraying period. Failure to conform to this requirement will be considered reason enough by the Engineer to reject the batch of binder."

Table B 4305/4 - Temperature/Time limits for Bitumen-Rubber

Binder Class	Short term handling		Storage		Spraying/Asphalt mixing		
	Temp (oC) max	Time (hrs) max	Temp (oC) max	Time (hrs) max	Temp (oC) max	Temp (oC) min	Time (hrs) max
Binder for seal (S-R1)	165	24	140	72	210	195	Refer to time/viscosity curve *2
Binders for asphalt (A-R1)	165	24	140	72	210	190	
Binders for crack sealing *1	165	24	*1	-	190	180	-

* Notes

Due to the relatively small quantities utilised, bitumen rubber crack sealants are invariably supplied in a cold, pre-blended, form. Only the quantity required should thus be heated immediately prior to application. Rapid localized heating of the product should be avoided.

The Time/Viscosity relationship must be determined for each specific blend."

(d) Homogeneous cold applied modified binders

Add the following:

"The requirements for short term handling, storage and application of these binders shall comply with the requirements listed in table B4305/5:

Table B4305/5 - Temperature/Time limits Polymer Modified Emulsions

Binder Class	Short term handling		Storage		Spraying		
	Max Temp (oC)	Max Time (hrs)	Max Temp (oC)	Max Time (hrs)	Max Temp (oC)	Min Temp (oC)	Max Time (hrs)
SC-E1 SC-E2	70	24	Ambient	240+	80	50	2
CC-E1	Ambient	240+	Ambient	240+	Ambient		240+

(e) Homogeneous hot-applied binders (summer grade)

In the second paragraph, replace table 4305/3 with "table B4305/3":

Table B4305/3 - Temperature/Time limits for Hot Polymer Modified Binder

Binder Class	Short term handling		Storage		Spraying/Asphalt mixing		
	Max Temp (oC)	Max Time (hrs)	Max Temp (oC)	Max Time (hrs)	Max Temp (oC)	Min Temp (oC)	Max Time (hrs)
S-E1;S-E2	180	24	150	240	200	185	8
C-E1	160	24	140	240	170	160	8
A-E1,A-E2,A-P1	180	24	140	240	170	160	36

B4306 Stockpiling of aggregate

(a) General

Add the following:

" The Contractor shall heed the environmental requirements in the preparation, operation and closure of stockpile sites. The positions for stockpiling of aggregate and the proposed operation methods shall be approved by the Engineer before delivery of the aggregate can commence."

B4307 Construction of a seal

(b) Single and double aggregate seals

(i) Application of tack coat and aggregate

Replace the last sentence of the fourth paragraph with the following:

"The Contractor shall so place the strips when constructing the seal that the joint between two adjacent aggregate applications shall be located along the centreline and at 3,7 m from the centreline."

Add the following to the fourth paragraph:

“Joints shall be straight and aggregate shall be broomed back in a neat straight line before the next spray. String lines shall be used to demarcate joint edges. All stone-loss and "tram-lining/roping" shall be made good by the Contractor at no additional cost.”

(ii) Initial rolling of aggregate

Replace the second sentence with the following:

"In the case of modified emulsions, initial rolling by means of self-propelled 5-ton flat steel wheel rollers shall only be permitted if crushing of aggregate does not occur. Pneumatic-tyred rolling shall be delayed until the emulsion has been allowed to break sufficiently to firmly secure the aggregate. Rolling shall be postponed if there is any pick-up of aggregate on the tyres of the pneumatic type roller."

(iii) Broom drag and final rolling of aggregate

Add the following after the first paragraph:

“The Contractor shall provide a back-chipping team, together with a pneumatic-tyred roller, of sufficient capacity to ensure that back-chipping and rolling of aggregate shall be completed within thirty minutes after initial application of the aggregate.”

Replace third paragraph with the following:

"After completing the spreading of the aggregate, final rolling shall consist of a minimum of four passes utilizing a 15-ton to 20-ton pneumatic-tyred roller, followed by one or two passes of a 6-8 ton flat steel wheel roller."

(iv) Joints between binder sprays

Add the following at the end of the paragraph:

"The protective sheets shall be made of reinforced building paper."

(v) Protection of kerbs, channels etc.

Add the following:

"Where bitumen binder is to be sprayed directly adjacent to existing concrete kerbs, channels, side drains, concrete edge beams and bridge balustrades, or over bridge joints, such concrete elements shall be covered with an approved reinforced building paper."

Add the following subclause:

“(vi) Trial section

Before the Contractor commences with the construction of any seal work he shall demonstrate that the equipment and processes he proposes to use will enable him to construct the seal in accordance with the specified requirements.

At the commencement of the surfacing operation, a 200 m half-width section shall be considered as a trial. After completion of each phase of the seal on this 200 m section, the Engineer will review and then approve/reject the work method. If approval is granted for a specific operation i.e. application of tack coat, aggregate, fog or slurry, the Contractor may proceed with that approved operation.

Should the Contractor at any stage fail to deliver an acceptable product he shall rectify the problems at his own cost and demonstrate with a further trial section that he can carry out the operation successfully. No specific payment shall be made for conducting these trials and the cost thereof shall be deemed to be included in the tendered rates of Section 4300."

B4308 Rates of application

In the first sentence of the first paragraph, delete the following after "conventional":

"or homogeneous modified"

Add the following at the beginning of the second sentence:

"Homogeneous and"

In the second paragraph, replace 4314 with:

"B4314"

Add the following at the end of the second paragraph:

"In the case of single seals the Engineer may, at his discretion, permit the application of a diluted emulsion fog spray in instances where application rates are below the minimum allowable tolerances. In such instances no additional payment over and above the unit rate tendered for the accepted seal, plus or minus any variation from the nominal, will be made. In the case of sand seals or graded seals the Engineer may accept, at his discretion, an application of binder sprayed above the allowable tolerance subject to the Contractor, at his own cost, applying and rolling any additional sand/aggregate necessary as a result of such over application."

B4314 Tolerances and finish requirements

(c) The rate of application

Replace the first paragraph the following:

"The maximum permissible variation from the rates of application of aggregate or slurry, as ordered by the Contractor, shall be plus or minus 5%.

For binders, the maximum permissible variation from that specified shall be 5% for conventional bitumen and all emulsions (measured net cold), and 5% for hot applied modified binders (measured at spray temperature). Provided he is satisfied that the seal will perform satisfactorily, the Engineer may, at his discretion, conditionally accept out of tolerance variations at the reduced rates of payment listed in Table B4314/1 below. However, variations in total binder application rates in excess of those tabled shall be deemed rejected. Rejected sprays will not be considered for payment unless corrected to the satisfaction of the Engineer.

A lot for acceptance control purposes shall be at least 2000 litres. Lots smaller than 2000 litres shall be combined with succeeding lots until a combined lot not less than 2000 litres is obtained.

Table B4314/1

Payment Reduction Factors For Conditionally Accepted Binder Application Rates

Conventional bitumen and emulsion. Deviation from specified spray rate Net cold bitumen. (%)	Hot applied homogeneous and non-homogeneous modified bitumen. Deviation from specified rate. At spray temperature. (%)	% Payment of tendered rate for seal
±5,0	±5,0	100%
±6,0	±6,0	97,5%
±7,0	±7,0	95%
±8,0	±8,0	90%
±9,0	±9,0	85%
±10,0	±10,0	80%

Add the following at the end of the last paragraph:

"The completed surfacing shall be of uniform texture without gaps or patches and shall be free from longitudinal and transverse corrugations and any loose aggregate or binder spillage.

The edges of the completed bituminous surfacing shall be true to line."

SECTION 4400: SINGLE SEALS

B4402 Materials

Replace table 4402/1 with "Table B4302/13"

SECTION 4800: TREATMENT OF AN EXISTING SURFACE EXHIBITING CERTAIN DEFECTS

B4802 Materials

(a) Bituminous binders

Add the following to the first paragraph:

"The classification of modified binders for crack sealing shall be as shown in Table B4801

TABLE B 4801 - Classification of Modified Binders for Crack Sealing

Modified Binder Class (C)	Application
CH-E1	Crack Sealant - Hot applied
CC-E1	Crack Sealant - Cold applied
CH-R1	Crack Sealant - Hot applied

The letter codes used in the classification are defined as follows:

CH – crack seal applications (hot applied)

CC – crack seal applications (cold applied)

E – a polymer of the elastomer type (e.g. SBR, SBS, etc.)

R – crumbed rubber

The binders to be used on this contract for the sealing of cracks shall be CH-R1 and CC-E1 modified binder crack sealants. The minimum required properties of crack sealants are shown in Table B4802.”

TABLE B4802 - Properties for modified binder crack sealants

Softening point (R&B)	oC	MB-17	80 (min)	80* (min)	65 (min)
Elastic recovery @ 15oC	%	MB-4	80 (min)	80* (min)	N/A
Flow @ 60 oC	mm	MB-12	Nil	Nil	5
Resilience	%	MB-10	N/A	N/A	13 (min) 35 (max)
Torsional recovery @ 15oC	%	MB-5	Report	Report	Report
Solids content (m/m)	%	MB-22	N/A	55	N/A
Viscosity @ 165oC	Pa.s	MB-18	0,55 (max)	N/A	N/A
Dynamic viscosity (Haake @ 190oC)	DPa.s	MB-13	N/A	N/A	20 (min) 40 (max)
Viscosity @ 25oC	Pa.s	MB-18	N/A	0,8 (max)	N/A

* Note: Properties determined on binder residue

B4803 Plant and equipment

(b) Equipment for crack sealing

Replace this entire sub clause with the following:

“The Contractor shall inter alia provide the following equipment for crack sealing:

(i) Blowing out cracks

A mobile compressor capable of discharging at least 3 m³/min compressed air at 650 kPa pressure. The compressed air shall be free of water, oil and other deleterious matter that may adversely affect the bond between the sealant and the cracks. The compressor shall be free of oil and diesel leaks.

A lance shall be used to direct the force of the air into the cracks and must be manoeuvrable enough to follow the path of the crack accurately.

If hot air is specified, the compressed air must be heated by a hot air lance capable of achieving a temperature of 300oC in the combustion chamber.

(ii) Sealant applicator

The sealant shall be applied through an applicator manufactured specifically for this purpose. Essentially the equipment for the hot sealant shall consist of a mobile vessel capable of heating the sealant to the required application temperature by indirect heat, controlled by a thermostat to prevent overheating. A calibrated thermometer shall be fitted in an accessible position to accurately measure the sealant temperature in the tank. Only pumps which can deliver the sealant to the crack in a controlled fashion shall be used.

The sealant shall only be applied with pressure type application equipment to ensure that the cracks are filled rather than covered.

The Contractor shall ensure that all equipment is kept clean so as to prevent blockages and resultant poor workmanship.”

B4804 Construction

Diluted Emulsion Treatment

Add the following:

“The tariff for this treatment must allow for a water cart to moisten the road surface before the diluted emulsion treatment takes place. The tariff must also provide for the provision of material (water) and labour.

(c) Slurry seals

Slurry seals applied by hand

Add the following:

“The tariff for this treatment is based on conventional methods and in its entirety dependant of the provision of the implementation of emerging Contractors by means of labour based incentives.

B4804 Cleaning of cracks with compressed air

(f) Sealing cracks

Only cracks larger than 5mm in width will be sealed.

Preparation

Add the following:

“With the use of warm rubber bitumen or natprolastic for crack sealing, the only method to be used will be the ‘Hot Lance’ method. The temperature of the compressed air would be at least 200°C. No other method of crack sealing will be allowed.”

Add the following:

“(vi) Hyvar-X will be used as herbicide for crack sealing. The dilution of the herbicide will be done in accordance with the instructions as supplied by the supplier.

(vii) The rate of application of hot bitumen rubber shall be determined on site. The cracks will be filled according to the method of the specification.”

SPECIFICATION FOR THE APPLICATION OF A POLYMERISED BITUMEN REJUVENATOR WITH A MASTIC FILLER (PBRF)

100 CONTENTS

- 101 Scope
- 102 Materials
- 103 Plant and Equipment
- 104 General Limitations and Requirements
- 105 Storage of Polymerised Bitumen Rejuvenator with a Mastic Filler
- 106 Stockpiling of Aggregate
- 107 Construction of Polymerised Bitumen Rejuvenator with a Mastic Filler Seal
- 108 Opening to Traffic
- 109 Defects
- 110 Maintenance
- 111 Tolerances and Finish Requirements
- 112 Measurement and Payment

101 SCOPE

This section covers the materials, constructional plant, construction and requirements for the construction of a seal using a polymerised bitumen rejuvenator with a mastic filler (PBRF).

102 MATERIALS

(a) Base Bitumen

The bituminous binder used in the production of the PBRF shall comply with the requirements of SABS 307.

(b) Aggregates

The aggregate shall be an approved mixture of selected crusher sands.

103 PLANT AND EQUIPMENT

(a) General

All plant and equipment used on the works shall be of adequate rated capacity and in good working condition.

All plant and equipment to be operated on the road during construction of the seal shall be free from any binder, water, fuel or oil leaks, and no refueling or servicing of any equipment will be allowed to take place while such equipment is on the road.

(b) Mixer for PBRF

A batch mixer or a continuous type mixer shall be provided. The paddles of the mixer shall be so designed as to ensure thorough blending of the constituents of the PBRF.

(c) Application of PBRF

Handwork shall be used in applying PBRF, and then only in accordance with approved methods under the strict supervision of experienced personnel and with equipment suitable for performing the work in accordance with specified requirements.

(d) Miscellaneous Equipment

Suitable fire-fighting equipment for dealing with bitumen fires shall be available on site, together with suitable first aid equipment for dealing with bitumen burns. (Refer to Sabita Manual 8: Bitumen Safety Handbook).

104 GENERAL LIMITATIONS AND REQUIREMENTS

(a) Weather limitations

A minimum road surface temperature of 8°C and rising temperature shall apply to PBRF.

No work shall be done during foggy or rainy weather. When a cold wind is blowing, the above temperatures shall be increased by 3°C to 6°C, as directed by the Engineer.

When the emulsion breaking process accelerates to such an extent that it renders the product unworkable in attaining the required end result, for instance when the surface temperature is in excess of 60°C, no sealing shall be done. When strong winds are blowing which are likely to interfere with the proper execution of the work, no sealing shall be done.

(b) Moisture content

No sealing shall be carried out immediately after a rainy spell on an existing partly cracked and/or highly permeable surfacing, which could result in the trapping of moisture in the pavement structure. A minimum delay of 24 hours, or such extended period as ordered by the Engineer, shall apply.

(c) Preparation of areas to be sealed

Areas to be sealed shall be cleaned of all dust, dirt, dung, oil or any other foreign matter that may be deleterious to the seal.

(d) Existing surfaces to be resealed

Any failures in the existing road pavement shall first be repaired before applying the PBRF.

105 STORAGE OF POLYMERISED BITUMEN REJUVENATOR WITH A MASTIC FILLER

The modified bitumen may be stored at ambient temperature for long periods.

106 STOCKPILING OF AGGREGATE

Sites for the stockpiling of aggregates shall be prepared in such manner that no grass, mud, dirt or other deleterious material will be included when the aggregates are loaded for use.

Access roads to stockpile sites shall be prepared and maintained in such a way that no dirt is conveyed by vehicle wheels onto the areas to be resealed whilst aggregate is being transported to or from the stockpiles.

Stockpiles shall be so sited that they will not be exposed to excessive contamination with dust arising from traffic on the road or access roads.

107 CONSTRUCTION OF POLYMERISED BITUMEN REJUVENATOR WITH A MASTIC FILLER SEAL

(a) Protection of kerbs, channels, etc.

Kerbs, channels, manholes and any other structures which may be soiled by PBRF during application shall be suitably protected.

The Contractor shall replace, at his own cost, any items that have been soiled and cannot be cleaned entirely. The painting of soiled surfaces will not be accepted as a suitable remedy.

(b) Rate of application

PBRF shall be applied on any designated area at the rate of application determined by the supplier and the Engineer. The nominal rate for tendering purposes shall be 0,001m³/m².

No payment will be made for PBRF applied in excess of the rate ordered plus the permitted tolerance, or at a rate lower than the specified rate minus the permitted tolerance, unless, in the opinion of the Engineer, such over-applications or shortfall can be satisfactorily corrected.

(c) Blinding

A light blinding layer of washed natural sand shall be applied by the Contractor to prevent PBRF from being picked up by traffic. The blinding layer shall be spread evenly over the full indicated surface. If required by the Engineer, the blinding shall be spread evenly by means of hand brooms.

108 OPENING TO TRAFFIC

The Contractor shall be responsible for determining when any sealing layer is to be opened to public traffic.

The road shall not be opened to traffic until the binder has set sufficiently to prevent it being picked up by the wheels of passing traffic.

109 DEFECTS

Where, in the opinion of the Engineer, any unacceptable loss of PBRF or bleeding of the road surface, has occurred during the contract or maintenance period and this can be attributed to the Contractor not having observed any of the requirements of the specifications, not using the correct rates of application, or to any other omission or fault on the part of the Contractor, any corrective work required shall be at the Contractor's expense.

110 MAINTENANCE

The Contractor shall maintain the bituminous surface until the work is finally accepted by the Employer. Any damage done to the surface, or any defects which may develop before the issue of the maintenance certificate, fair wear and tear excepted, shall be corrected by the Contractor at his own cost and to the requirements of the Engineer.

111 TOLERANCES AND FINISH

REQUIREMENTS

The completed seal shall be of uniform texture, without gaps or patches, and shall be free from any bitumen spillage.

Any areas which show signs of bleeding after the section has been opened to traffic shall be corrected. Corrective work shall be carried out in such manner as to blend in colour, texture and finish with adjacent work.

The maximum permissible variation from the rate of application specified for the PBRF shall be plus or minus 5%.

112 MEASUREMENT AND PAYMENT

Item	Unit
100.01 Applying a polymerised bitumen rejuvenator with mastic filler at a rate of 0,001m ³ /m ² .by hand	square metre (m ²)

The tendered rate shall include full compensation for procuring and furnishing all the materials, for mixing and applying PBRF, demarcating all areas to be treated, as well as for all plant, labour and incidentals necessary to complete the work as specified.

Item	Unit
100.02 Variation in polymerised bitumen rejuvenator with mastic filler	cubic metre (m ³)

Where the actual rate of application used in the works varies from the specified nominal rate and mix proportions, adjustment of compensation will be made –

(a) as a payment to the Contractor in respect of any authorized increase in quantities which exceed those specified, where such increase has been ordered, in writing, by the Engineer;

or

(b) as a refund to the Employer in respect of the decrease in quantities which are less than those specified, irrespective of whether such decrease results from an authorized decrease in the rates of application, or from unauthorized reductions on the part of the Contractor.

Payment for a prescribed rate of application shall be based on the actual rate of application used, provided that this does not exceed the prescribed rate of application, plus any tolerance, in the rate of application allowed. If the actual rate of application exceeds the prescribed rate or proportion, payment shall be based on the prescribed rate of application plus any tolerance allowed. If the actual rate of application is below the prescribed rate of application ordered, payment shall be based on the actual rate of application, regardless of any tolerance allowed. Notwithstanding the above, the Engineer shall be fully entitled to reject work which has not been constructed in accordance with the specifications or the rates of application prescribed by him.

Item	Unit
100.03 Aggregate for blinding with washed natural sand	cubic metre (m ³)

The unit of measurement shall be the cubic metre of washed natural sand measured in the hauling vehicles.

The tendered rate shall include full compensation for providing the sand and applying the blinding coat complete as specified, and, if so required, for temporarily stockpiling the sand at an approved locality.

Item	Unit
100.04	Cleaning of cracks with compressed air
	square metre (m ²)

The unit of measurement for cleaning cracks with compressed air shall be the square metre of road surface on which all cracks have been blown clean.

The tendered rate shall include full compensation for providing all equipment, labour, supervision and incidentals necessary for blowing clean the cracks over the full width of the road, all to the satisfaction of the Engineer.

SECTION 8100: TESTING MATERIALS AND WORKMANSHIP

B8101 Scope

Add the following:

“The Engineer shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any additional tests, at such times and at such locations in the Works as the Engineer shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Engineer, and copies of the test results shall be promptly submitted to the Engineer.”

B8103 Cost of testing

Replace paragraph (a) Process control with the following:

“The costs of all testing carried out by the independent laboratory in accordance with the requirements of the Contract, shall be borne by the Contractor and shall be deemed to be included in the bidded rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms of the Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of the Contract.

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (e.g. re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

Add the following:

(d) Additional tests required by the Engineer

The costs of any additional tests required by the Engineer in terms of the Contract, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Engineer, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.”

B8117 FIELD BINDER TRANSVERSE DISTRIBUTION ("BAKKIE") TEST

1. SCOPE

This method sets out the procedure for the simple field determination of the transverse distribution of a binder distributor. Certain statistical criteria are applied to the results to determine conformance with requirements.

2. DEFINITION

The purpose of the test is to determine conformance of the transverse distribution of the spray bar, as measured by direct discharge from sets of 3 nozzles, using the project binder.

3. APPARATUS

3.1 Steel troughs

Steel troughs fitted with handles and manufactured from 3 mm mild steel plate, conforming to the following or similar dimensions:

Width - 265 mm

Depth - 405 mm

Height - 300 mm

A total of 14 troughs are required for a 4,2 m wide spray bar. Each trough must be clearly numbered on its side.

3.2 Balance

A balance capable of weighing up to 50 kg to an accuracy of 20 g.

3.3 Personal protective clothing

The appropriate safety gear must be worn when performing this test and should include a pair of asbestos gloves, face shield and approved overalls.

3.4 Cleaning fluid

Diesel or other suitable fluid.

4. PREPARATION OF THE BINDER DISTRIBUTOR

Ensure that all the binder strainers on the sprayer have been cleaned.

Preheat the binder in the distributor tank to within ± 5 °C of the required spray temperature.

Circulate the binder through the spray bar for at least 15 minutes.

4.1 Position the spray bar over a full-length drip tray. A short preliminary spray is made to ensure that all the nozzles are functioning and that the machine is in normal working condition. Suck back the binder from the drip tray into the distributor tank on completion of test spray.

If necessary, correct any malfunctioning of the spray bar.

5. METHOD

- 5.1 Ensure that all troughs are clean and free of any water or other materials.
- 5.2 Place the pre-weighed steel troughs described in 3.1 under the spray bar in such a manner that the discharge of each set of three nozzles are collected in one trough. Ensure that the troughs are placed in numerical order.
- 5.3 Adjust the spray bar height to ensure that the nozzles are below the sides of the trough.
- 5.4 Increase the bitumen pump speed to yield the desired triple spray overlap in accordance with the type of nozzles and type of binder being used. Typically, this could vary between 12 and 20 litres per minute for conventional binders.
- 5.5 Open the nozzles and spray sufficient binder to fill the troughs without risking spillage during handling.
- 5.6 Weigh the troughs to determine the mass of binder sprayed.
- 5.7 On completion of the weighing and before the binder cools suck back the binder into the distributor tank.
- 5.8 Only clean the troughs with a suitable cleaning fluid once they have cooled down to room temperature.
- 5.9 Store used cleaning fluid in a suitable container for re-use.

6. CALCULATION AND REPORT

- 6.1 Determine the net mass of binder in each trough to the nearest 20 grams.
Net mass binder = (M1, M2, M3 Mn).
- 6.2 Calculate the average mass of the binder collected in all the troughs.
$$M_{ave} = \sum (M1 .. Mn) / n$$
where n = number of troughs
- 6.3 Calculate the deviation from the average mass for every trough and express the value as a percentage.
$$\% \text{ Deviation} = (M_{ave} - M_i) / M_{ave} \times 100$$
- 6.4 If the transverse distribution is out of specification, make the necessary adjustments to the spray bar and repeat the test.
- 6.5 Report results on a suitable report sheet.
- 6.6 Update the 'bakkie' test record with the relevant information for the distributor.

7. ACCURACY

Due to the varying nature of the different types of binders, cognisance must be taken of the respective binder's viscosity at spray temperature when establishing achievable tolerances, namely:

Conventional binders	40 – 100 CPs
Polymer modified binders	120 –200 CPs
Bitumen rubber	2,000 – 3,000 CPs

SECTION 5700: ROAD MARKINGS

B5703 Standards: Applying the Spray plastic

SPRAYPLASTIC shall be applied to a thickness of not less than 1,2mm. The rate of application of Spray plastic shall therefore be applied at a nominal rate of 1,2 litre/m².

SECTION 11000: MISCELLANEOUS ACTION

B11001 Scope of works (RAISING/LOWERING OF MANHOLES)

This action deals with the raising / lowering of typical manholes for valve boxes, sewage, storm water, etc. to the final level of the newly sealed road. The raising / lowering of manholes apply to all roads which will be sealed by an asphalt overlay. The raising / lowering of manholes prior to other resealing methods would be done to the sole discretion of the Engineer.

B11002 Materials (RAISING/LOWERING OF MANHOLES)

25MPa concrete would be used for the raising / lowering of a lid. Collars for pipes may be used as an alternative. The square concrete slab for the lid would also be 25MPa concrete and be finished off with a steel trowel. Drawing no PK641/06/00 in Section C, part 3.2.4 of this document addresses this detail required.

B11003 Machinery & equipment (RAISING/LOWERING OF MANHOLES)

The existing surface must be removed 150mm wider than the cover. It must be cut rectangular by means of a diamond saw or similar approved equipment. The backfilled concrete must be finished off with a metal trowel.

B11004 Standards & tolerances (RAISING/LOWERING OF MANHOLES)

The lid of the raised / lowered manhole is to have a maximum tolerance of 3mm from final road level. Check by means of a level position on any two points on either side of the repaired area.

B11005 MEASUREMENT & PAYMENT

ITEM UNIT

B110.01 Raising of manholes Number (No)

The measuring unit is the number of manholes and valve chambers that must be raised / lowered per depth increment.

The tendered tariff must include full remuneration for the provision of all labour, equipment, material for the rebuilding of the manhole to the designated new height and traffic control, regardless of the height of the manhole.

ITEM UNIT

B110.02 Traffic calming devices: Speed humps 3,5m wide. Metre (m)

The tendered rate shall include full remuneration for the provision of labour, equipment, material for the construction of "speed humps". Separate rates are to be provided per speed hump for associated road signs and road markings as per drawing PK641/08/0. The rates for the road signs and road markings are per speed hump constructed irrespective of the road width.

C3.5 MANAGEMENT OF THE WORKS

C3.5.1 GENERIC SPECIFICATIONS

The Standardized Specifications for Road and Bridge works for State Road Authorities 'COLTO' listed in 3.4.1.1 are applicable.

C3.6 HEALTH AND SAFETY

C3.6.1 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES

(a) Construction Regulations, 2014

The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2014 (the regulations) as promulgated in Government Gazette No 37307 and Regulation Gazette No 10113 of 7 February 2014. (A copy of the Construction Regulations is included as an Annexure in this Volume). Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the Works.

The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the Project Specifications, Schedule of Quantity and Drawings, as well as in the Employers' health and safety specifications (regulation 4(1)) of the Construction Regulations 2014, which are bound in the Contract document/will be issued separately by the Employer.

The Contractor shall in terms of regulation 5(1) provide a comprehensive health and safety plan detailing his proposed compliance with the regulations, for approval by the Employer.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.

A payment item is/Payment items are included in the Schedule of Quantities to cover the Contractor's cost for compliance with the OHS Act and the abovementioned regulations.

C3.6.2 PROTECTION OF THE PUBLIC

"The road reserves of all roads to be sealed in terms of this agreement shall be handed over to the Contractor on the commencement of the actual work on the street. The Contractor must ensure that a free and safe flow of traffic is maintained at all times and that the requirements of the specifications are complied with. Special consideration must be given to traffic when work is done in the CBD, main roads and primary distributors.

C3.6.3 BARRICADES AND LIGHTING

Written notices (paper size A5) setting out the dates on which work is to be done in the form of the example below must be given to all residents bordering on the streets at least 48 hours before seal work is commenced. These notices must be issued where slurry work and diluted emulsion are to be carried out. Should the Contractor fail to do this the Engineer shall stop the work until this requirement has been complied with."

C3.6.4 TRAFFIC CONTROL ON ROADS

The Contractor must also liaise with Traffic Department of City of Mbombela in order to ascertain its requirements relating to the engagement of traffic and to apply during the Contract. When the physical work on the street is completed the relevant portion of the street shall be handed over to the Employer. These arrangements must be recorded on a daily basis in the site diary.

C3.6.5 MEASURES AGAINST DISEASE AND EPIDEMICS

Not applicable

C3.6.6 AIDS AWARENESS

Not applicable

C3.7 REFERENCES TO THE SCOPE OF WORKS IN TERMS OF THE ENVIRONMENTAL MANAGEMENT PLAN (EMP)

1. INTRODUCTION

The EMP will address the environmental impacts during the design, construction and operational phases of a project. Due regard must be given to environmental protection during the entire road project. In order to achieve this, a number of environmental specifications/recommendations are made. These are aimed at ensuring that the Contractor maintains adequate control over the project in order to:

Minimise the extent of impact during construction,

Ensure appropriate restoration of areas affected by construction.

Prevent long term environmental degradation.

The Contractor must be made aware of the environmental obligations that are stipulated in this document, and declares himself/herself to be conversant of all relevant environmental legislation. The Contractor should also be aware that the Engineer will monitor the implementation of the procedures.

2. POLICY STATEMENT

The construction will be to the best management practices as identified to minimize the environmental impact of activities associated with the development.

3. OBJECTIVES OF THE EMP

The EMP has the following goals:

Identifying those construction activities that may have a detrimental impact on the environment;

Detailing the mitigation measures that will need to be taken, and the procedures for their implementation;

Establishing the reporting system to be undertaken during the construction.

The EMP also serves to highlight specific requirements that will be monitored during the development and should the environmental impacts not have been satisfactory prevented or mitigated, corrective action will have to be taken. The document should, therefore, be seen as a guideline that will assist in minimising the potential environmental impact of activities.

4. DESIGNATED ENVIRONMENTAL OFFICER

For the purpose of the EMP, a nominated representative of the Contractor should be the designated environmental officer for the project. The nominated representative of the Contractor will therefore be responsible for ensuring that the provisions of the EMP are complied with. The Engineer will be responsible for issuing instructions to the Contractor where environmental considerations call for action to be taken. The environmental officer will submit monthly reports to the Engineer on site who will verify the information.

5. LEGAL REQUIREMENTS

Under normal circumstances and EMP would be the end result or the final stage in the EIA procedure. However, a working agreement was negotiated between the National Department of Environmental Affairs and Tourism (DEAT) and the City of Mbombela. The agreement stipulates the project types the City of Mbombela need to submit to DEAT for approval and those project types the City of Mbombela do not need to submit for approval. For those actions that do not need approval, the City of Mbombela undertook to compile generic EMP's to assist to minimising degradation to the area. The following project types fall in this non-approval category: periodic maintenance, special maintenance, rehabilitation and specific upgrades.

6. MITIGATION MEASURES

In setting mitigation measures, the practical implications of executing these measures must be borne in mind. With early planning, both the cost and the impacts can be minimised.

6.1 Establishment of site offices

6.1.1 Site plan

The Contractor shall provide the Engineer on site with a plan detailing the layout of site offices facilities, such as chemical toilets, areas for stockpiling of material, storage of hazardous materials and provision of containers. The site offices should not be sited in close proximity to steep areas as this will increase soil erosion. Preferred locations would be flat areas along the route. If the route traverses water courses, streams and rivers, it is recommended that the site, and in particular the ablution facilities, aggregate stockpiles and hazardous material stockpiles are located as far away as possible from any water course as possible.

The site plan shall be submitted before the site hand over meeting.

Vegetation

The vegetation surrounding the site offices is to be left as intact as possible and vegetation planted at the site should be indigenous. Only trees directly affected by the works and such others as may be indicated by the Engineer in writing, may be sawn off/removed.

The project specification for the rehabilitation of the grass cover shall be strictly adhered to. Any proclaimed weed or alien invader plant shall be cleared by hand before seeding.

6.1.3 Rehabilitation

The site offices will require rehabilitation at the end of the contract. All construction material, including concrete slabs and braai areas are to be removed from the site on completion of the contract.

6.1.4 Water for human consumption

Water for human consumption must be tested and treated in accordance with recommendations.

6.2 Sewage treatment

Adequate toilet facilities are to be provided. Use of the veld for this purpose shall not, under any circumstances, be allowed. The Contractor shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the Engineer. Latrines shall be positioned within walking distance from wherever employees are employed on the works.

Save and effective sewage treatment will require one of the following sewage handling methods: septic tanks and soak aways, dry composting toilets such as “enviro loos”, or the use of chemical toilets which are supplied and maintained by a Sub contractor. The type of sewage treatment will depend on the geology of the area selected, the duration of the contract and proximity (availability) of providers of chemical toilets is to be done in consultation with the Site Engineer.

6.3 Waste management

Waste management and waste minimisation must be implemented at the outset of the contract.

6.3.1 Litter

No littering by construction workers are allowed. During the construction period, the facilities shall be maintained in a neat and tidy condition and the site is to be kept free of litter.

6.3.2 Removal of solid waste

Solid waste is to be stored in an appointed area for collection and disposal. A refuse control system must be established for the collection and removal of refuse to the satisfaction of the Engineer. Disposal of solid waste will be in a Department of Water Affairs and Forestry (DWAF) licensed landfill site.

6.3.3 Hazardous waste

Hazardous waste such as bitumen, tar, oils, etc. shall be disposed of in a Department of Water Affairs and Forestry approved landfill site. Special care must be taken when using tar products such as tar prime or pre-coating fluid to avoid water-soluble phenols from entering the ground or contaminating water.

6.4 Soil management

6.4.1 Topsoil

The contract provides for the stripping and stockpiling of topsoil from the site for later reuse. Topsoil is considered to be of a minimum thickness of + 300 mm of natural soil, including all the vegetation and organic matter. The areas to be cleared of topsoil shall include the storage areas. Weeds appearing on the stockpiled topsoil shall be removed by hand before seeding. Soils contaminated by hazardous substances shall be disposed of in an approved Department of Water Affairs and Forestry waste disposal site.

6.4.2 Borrow material

The Contractor's attention is drawn to the requirements set forth by the Department of Mineral and Energy Affairs in terms of the submission of EMPR's for establishment, operation and rehabilitation of borrow pits and quarries. The cost of complying with the requirements shall be deemed to be included in existing rates in the schedule of quantities. Read with the Specification Section 203.

6.5 Discovery of archaeological sites, artefacts or graves

6.5.1 Archaeological site

If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately. The Contractor shall take reasonable precautions to prevent any person from removing or damaging any such article and shall immediately upon discovery thereof inform the Engineer of such discovery. The National Monuments Council must be contacted who will appoint an archaeological consultant. Work may only resume once clearance is given in writing by the archaeologist. Read with General Conditions of Contract.

6.5.2 Graves

If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker as well as the National Monuments Council should be contacted. The undertaker will place advertisements in the newspapers concerning the grave. He will also provide for the relocation of bones, should it be necessary. Read with General Conditions of Contract.

6.6 Stockpiled material

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

The area chosen shall be devoid of indigenous trees and shrubs. Care shall be taken to preserve all vegetation in the immediate area of these temporary stockpiles. After the stockpiled material has been removed, the site shall be reinstated as closely as possible to its original condition. All areas affected by stockpiling shall be landscaped, top soiled and grassed to the Engineer's approval and at the Contractor's cost.

Material milled out of the existing road surface that is temporarily stockpiled within the road reserve shall:

be stockpiled so as to be as inconspicuous as possible

be prevented from contaminating water courses,

be cleared of weeds.

In all cases, the areas for stockpiling and disposal of construction rubble shall be approved by the Engineer before such operation commences.

6.7 Fuel, diesel and other hazardous materials

6.7.1 Hazardous materials

All hazardous materials i.e. bitumen binders shall be stored in an appointed area that is fenced and has restricted entry. Storage of bituminous products shall only take place using suitable containers to the approval of the Engineer.

Under no circumstances shall the spoiling of bituminous products on the site, over embankments, in borrow pits or any burying, be allowed. Unused or rejected bituminous products shall be taken to the supplier's production plant. No spillage of bituminous products shall be allowed on site. Affected areas shall be promptly reinstated to the satisfaction of the Engineer.

6.7.2 Fuel

Should any fuel storage tank be required on site, the Contractor shall ensure that he has complied with the necessary legal requirements for the erection of such tanks. Leakage must be avoided. The fuel and diesel areas should be bonded to accommodate any spillage or overflow from these activities

6.7.3 Oil, grease

Oil, grease and cleaning materials from the maintenance of vehicles and machinery shall be collected in a sump and sent back to the supplier or, otherwise disposed of at a registered site.

6.7.4 Cooking oil

The Contractor should ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.

6.7.5 Spillages

Streams, rivers and dams must be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous products. In the event of a spillage, prompt action must be taken by competent instances to clear the affected area.

6.8 General considerations

Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a designated register and the response noted with the date and action taken. This record must be submitted with the monthly reports.

Any avoidable non-compliance with the above-mentioned measures may be considered sufficient ground for withholding payment of part or all amounts to be paid for the said item.

7. MEASUREMENT AND PAYMENT

The Contractor shall not be separately reimbursed or compensated in respect of his compliance with the provisions of this part of the Scope of Works. All costs so incurred shall, save and except to the extent provided for the schedule of quantities under section 1300, be deemed to be included in the rates tendered for the various items of work listed in the schedule of quantities.

SUMMARY OF MITIGATION MEASURES

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
Establishment of site offices	Siting of offices	Preferred areas would be flat areas along the route. Avoid steep areas as soil erosion could increase. Avoid water courses	1302(a)
	Site Plan	Contractor will provide Engineer detail of layout of site facilities within two weeks of moving to the site i.e. chemical toilets, the demarcation of areas for stockpiling of materials, storage of hazardous materials and the provision of containers. The offices shall be fenced. The site plan will be submitted before the site hand over meeting.	1302(a) 1402(e)
Site rehabilitation	Clean up	All construction material is to be removed from the site on completion of the contract.	1302(a); 5800;5900
Vegetation	On site	Vegetation planted on the site should be indigenous. Only trees directly affected by works as indicated in writing by Engineer, shall be sawn off/removed	5802(d); 5804; 5807
	Weeds	Clearance of weeds must be done by hand before seeding.	5801(b)
	Grass cover	The grass cover surrounding the construction site is to be left as intact as possible or restored to its original condition.	5802(b), (c), (e) 5805 5806
Water	Available for human consumption	Water for human consumption must be tested and treated in accordance with recommendations.	
Soil management	Topsoil	The topsoil (+ 300 mm) of any excavation shall be removed and stockpiled separately from underlying material in an appointment area	3104(a) 5802(a), (g) 5804
	Borrow material	EMPR's for borrow pits to be submitted to the Department of Mineral and Energy Affairs for approval	3100

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
Archaeological & Cultural sites	Discover of archaeological sites of artefacts	If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately and an archaeological consultant must be contacted. Work may only resume once clearance is given in writing by the archaeologist.	GCC
Graves	Discovery of graves	If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker should be contacted	GCC
Waste management	Solid & Construction waste	Solid waste is to be stored in an appointment area for collection and disposal. Disposal of waste will be in a DWAF licensed landfill, and no waste may be burnt on site.	1404(a)
	Litter	The site is to be kept free of litter	1302(b)
Sewage treatment	Toilet facilities	Adequate toilet facilities are to be provided, and the siting of chemical toilets is to be done in consultation with the site Engineer. Use of the veld for this purpose shall not be allowed.	1402(g) 1404(a)
Fuel, diesel & hazardous materials	Hazardous Materials	All hazardous materials i.e. bitumen binders will be stored in an appointed area that is fenced and has restricted entry. No spoiling of bituminous products on site, over embankments, in borrow pits or any burning. No spillage of bituminous products shall be allowed on site.	
	Fuels	All fuel tanks will be stored in an appointed area. Leakage will be avoided.	
	Cooking fuel	The Contractor should ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.	1404(b)
	Oil, grease	Oil, grease and cleaning materials from maintenance of vehicles shall be collected in a sump and sent back to supplier.	
	Spillages	Streams, rivers or dams must be protected against spillages of pollutants mentioned in 6.7 (e). In the event of a spillage, prompt action must be taken to clear the affected area.	

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
General considerations	Lines of authority	A nominated representative of the Contractor will be the designated environmental officer for the site.	
	Reports	The environmental officer will submit monthly reports to the Engineer who will verify the information	
	Complaints	Complaints received regarding activities on the construction site pertaining to the environment should be recorded in a designated register, and the response noted with the date and action taken. This record must be submitted with the monthly report	

PART C4 SITE INFORMATION

PART C4 SITE INFORMATION**CONTENTS**

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C4.2 TENDER DRAWINGS

C4.3 LOCALITY MAP

ANNEXURE A OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

C4.1 NATURE OF GROUND AND SUBSOIL CONDITIONS

The contractor shall have no claim against the Employer in respect of geotechnical or subsurface conditions encountered during the course of the Contract.

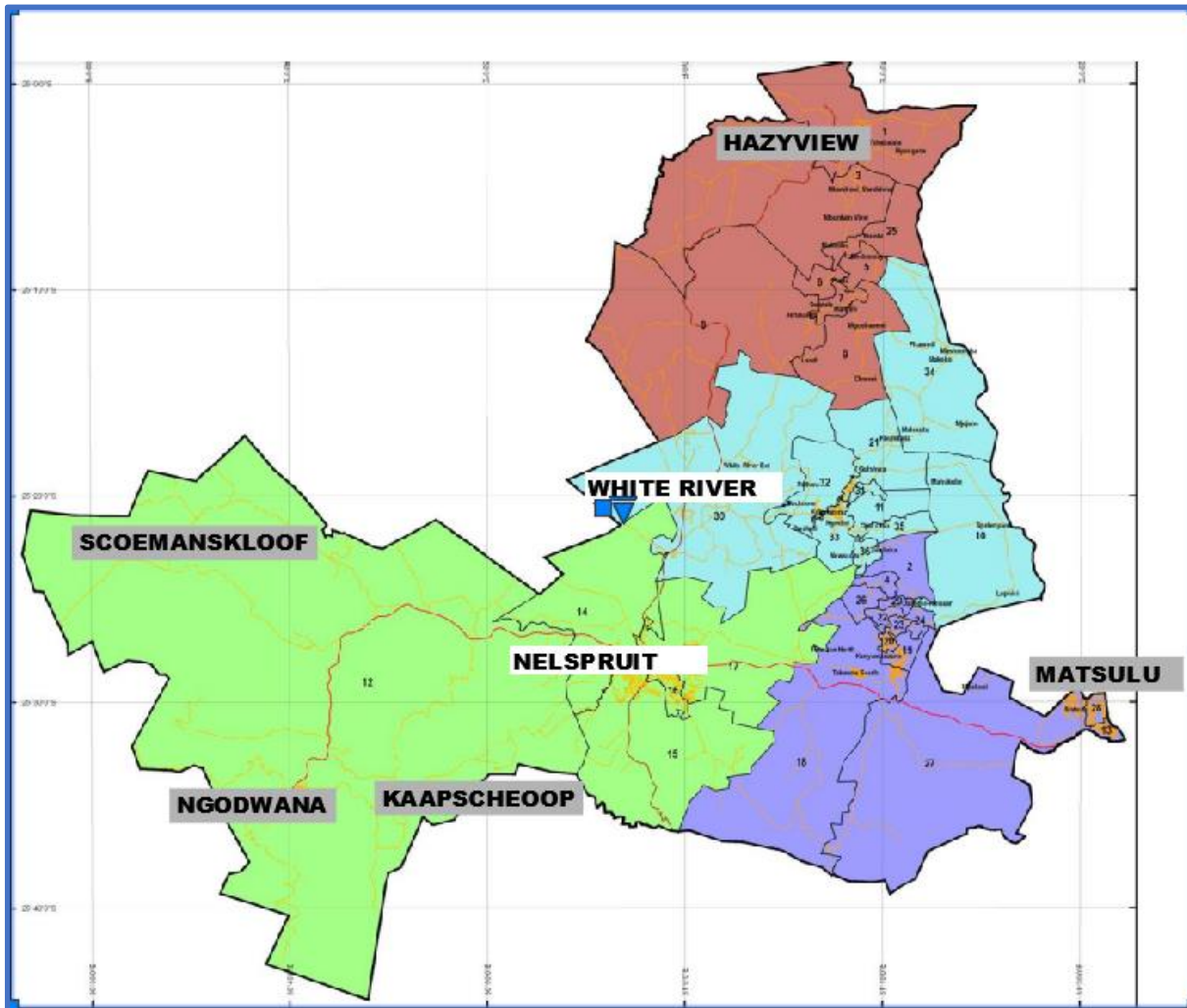
C4.2 TENDER DRAWINGS

The tender drawings reduced to A4 size, listed and included hereafter are:

Sheet No.	Description	Drawing No.
1	LOCALITY MAP	SH-1160-00-LOC
2	TYPICAL DETAIL: TRAFFIC MANAGEMENT	SH-1160-21-01-TD
3	TYPICAL DETAILS : KERBS	SH-1160-21-02-TD
4	SPEED HUMP DETAIL	SH-1160-21-03-TD
5	ROAD SIGNS ERECTION	SH-1160-21-04-TD

C4.3 LOCALITY MAP

The locality map showing the boundaries of the various SERVICE DELIVERY AREAS is shown in the figure below.



ANNEXURE A: OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

INDEX FOR OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

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1. PREAMBLE TO OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

General Statement

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end, the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety (OHS) Act (Act 85 and Amendment Act 181) of 1993, and the Construction Regulations 2003 issued on 18 July 2003 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory to the Employer (Client) in his own right for the execution of the contract, and he shall enter into an agreement in respect of the Occupational Health and Safety Act in the form as included in Section C1.4 - AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993.

(a) Employer's Health and Safety Specification

The Employer's Health and Safety Specification will be included in the tender documents as part of the Project Specifications.

(b) Tenderer's Health and Safety Plan

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

The Contractor shall not be entitled to claim for extension of time or standing time and the related costs for any delays due to delayed commencement or suspension of the work arising from the lack of approval of or non-compliance with the Health and Safety Plan.

2. SCOPE

This specification covers the health and safety requirements to be fulfilled by the Contractor to ensure a continued safe and healthy environment for all workers, employees and Sub contractors under his control and for all other persons entering the site of works.

This specification shall be read with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993, and the corresponding Construction Regulations 2003, and all other safety codes and specifications referred to in the said Construction Regulations.

In terms of the OHS Act Agreement, C1.4 in Part C1 of the tender document, the status of the Contractor as mandatory to the Employer (Client) is that of an employer in his own right, responsible to comply with all provisions of OHS Act 1993 and the Construction Regulations 2003.

This safety specification and the Contractor's own Safety Plan as well as the Construction Regulations 2003, shall be displayed on site and made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

3. DEFINITIONS

For the purpose of this contract the following shall apply:

- (a) "Employer" where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract and it shall have the exact same meaning as "Client" as defined in the Construction Regulations 2003. "Employer" and "Client" is therefore interchangeable and shall be read in the context of the relevant document.
- (b) "Contractor", wherever used in the contract documents and in this specification, shall have the same meaning as "Contractor" as defined in the General Conditions of Contract.

In this specification the terms "Principal Contractor" and "Contractor" are replaced with "Contractor" and "Subcontractor" respectively.

For the purpose of this contract the "Contractor" will, in terms of OHS Act 1993, be the mandatory of the Employer, without derogating from his status as an employer in his own right.

- (c) "Engineer" where used in this specification, means the Engineer as defined in the General Conditions of Contract. In terms of the Construction Regulations the Engineer may act as agent on behalf of the Employer (the Client as defined in the Construction Regulations).

4. PROJECT DESCRIPTION

The work to be carried out under this contract is as described in Part C3 Scope of Works.

5. TENDERS

The Contractor shall make available the following during the tender process:

- (a) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2003.

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

6. NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

After award of the contract, but before commencement of maintenance work, the Contractor shall, in terms of Regulation 3, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- (a) the demolition of structures and dismantling of fixed plant of height of 3,0 m or more;
- (b) the use of explosives;
- (c) construction work that will exceed 30 days or 300 person-days;
- (d) excavation work deeper than 1,0 m; or
- (e) working at a height greater than 3,0 m above ground or landings.

The notification must be done in the form of the pro forma included under Section 11 (The Occupational Health and Safety Act) of the tender document. See Schedule A for a copy of the notification.

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

7. GUIDELINES FOR THE DEVELOPMENT OF A HEALTH AND SAFETY PLAN

Project Background

In terms of the Construction Regulations [Regulation 4 (1) (a)] of the Occupational Health and Safety Act, No 85 of 1993, the Client is required to compile an Occupational Health and Safety specification for each of its projects and the Contractor, appointed by the Client in terms of Regulation 4 (1) (c), is required to prepare an Occupational Health and Safety Plan. This plan has to be prepared in terms of Regulation 5 (1) as well as the Client's Occupational Health & Safety Specification. In terms of Regulation 4 (2), the Client and the Contractor are required to agree on the Occupational Health and Safety Plan before any work may commence.

Framework for an Occupational Health and Safety Plan

Introduction

The Contractor has to demonstrate to the Client 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. The Contractor could be required to submit the following documentation for perusal and verification by the Client:

- Management Structure
- Quality Plan
- Human Resources Plan
- Registered Workplace Skills Plan
- "Letter of good standing" from the Compensation Commissioner or licensed compensation insurer.
- Proof of induction and other training of employees
- Example copy minutes of previous Occupational Health and Safety Committee meetings and copies of Incident Investigation Reports

Contents of an Occupational Health and Safety Plan

The Occupational Health and Safety Plan shall include the following:

Occupational Health and Safety Management Programme

- Management of Occupational Health and Safety risks
- Occupational Health and Safety structures and appointments
- Programme of Occupational Health and Safety inspections
- Occupational Health and Safety Representatives
- Occupational Health and Safety committee

Communication and Management of the Work

- Management structure and responsibilities
- Occupational Health and Safety objectives for the project and arrangements for monitoring and review of Occupational Health and Safety performance
- Arrangements for
- Regular liaison between parties on site
- Consultation with the workforce
- The exchange of design information between the Client, Engineer, supervisors and Sub contractors on site
- Handling design changes during the project
- Selection and control of Sub contractors
- The exchange of Occupational Health and Safety information between all Sub contractors
- Security
- Site induction and onsite training
- Facilities and first-aid
- The reporting and investigation of accidents and incidents
- The production and approval of risk assessments and method statements
- Site Occupational Health and Safety rules
- Fire and emergency procedures
- Reporting to the Client i.e. results of Occupational Health and Safety inspections, incident and incident investigations and committee meetings
- Reporting of incidents to the Department of Labour and Compensation insurer where appropriate

Arrangements for Controlling Significant Site Risks

The following are some examples requiring arrangements for controlling the most significant site risks:

- Safety risks
- Services, including temporary electrical installations
- Preventing employees from falling into excavations, from trucks etc.
- Work with, on or near fragile materials
- Control of lifting operations
- The maintenance of plant and equipment
- Poor ground conditions
- Traffic routes and segregation of vehicles and pedestrians
- Storage of hazardous materials
- Dealing with existing unstable structures/land
- Accommodating adjacent land use
- Other significant safety risks as and when identified
- Health risks
- Storage and use of hazardous chemical substances
- Dealing with contaminated land or material

- Manual handling
- Reducing noise and vibration
- Provision of adequate lighting
- Ventilation considerations
- Extreme heat and cold temperature considerations
- Dealing with HIV/Aids and other illnesses
- Provision of and maintaining ablution and eating facilities
- Other significant health risks as and when identified

8 HEALTH AND SAFETY FILE

The Contractor shall in terms of Construction Regulation 5(7) 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 - which will be necessary to ensure the health and safety of any person who may be affected by the construction work.

The 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 the information as reflected in Schedule A.

The Health & Safety File shall be handed over to the Client on completion of the contract. It must contain all the documentation handed to the Contractor by any Sub contractors together with a record of all drawings, designs, materials used and other similar information concerning the completed project.

9. RISK ASSESSMENT

Before commencement of any construction work during the construction period, the Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer to Regulation 7 of the Construction Regulations 2003).

Risk is a measure of the likelihood that the harm from a particular hazard will be realized, 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 Contractor shall compile method statements to address or handle the following:

- Hazards particular to contract
- Identify what could go wrong and how
- Identify the likelihood of this happening
- Identify the persons at risk
- Identify the extent of possible harm
- Measures to eliminate or reduce each risk
- A monitoring plan
- A review plan

Contractors must ensure that all Sub 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, Sub contractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

10. APPOINTMENT OF EMPLOYEES AND SUB CONTRACTORS

Health and Safety Plan

The Contractor shall appoint his employees and any Sub contractors to be employed on the contract, in writing, and he shall provide them with a copy of his documented Health and Safety Plan, or relevant sections thereof. The Contractor shall ensure that all Sub contractors and employees are committed to the implementation of his Safety Plan.

Health and Safety Induction Training

The Contractor shall ensure that all employees under his control, including Sub contractors and their employees, undergo a health and safety induction training course by a competent person before commencement of construction work. No visitor or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

The Contractor shall ensure that every employee or visitor on site shall at all times be in possession of proof of the health and safety induction training issued by a competent person prior to commencement of construction work.

OH&S Training Requirements

The Contractor shall ensure that all employees under his control, including Sub contractors and their employees, undergo training in accordance with their job requirements, site requirements and training as prescribed by the Act and Regulations.

11. APPOINTMENT OF SAFETY PERSONNEL

Construction Supervisor

The Contractor shall appoint a full-time Construction Supervisor with the duty of supervising the performance of the construction work. He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

Construction Safety Officer

Subject to the decision by the Inspector of the Department of Labour and taking into consideration the size of the project and the hazards or dangers that can be expected, the Contractor shall appoint in writing a full-time or part-time Construction Safety Officer. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision will be made in the schedule of quantities to cover the cost of a dedicated construction safety officer appointed after award of the contract if so ordered by the Engineer.

Health and Safety Representatives

In terms of Sections 17 and 18 of the Act (OHSA 1993) the Contractor shall appoint a health and safety representative whenever he has more than 20 employees in his employ on the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 50 employees.

The function of the health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular basis, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

Health and Safety Committee

In terms of Sections 17 and 18 of the Act (OHSA 1993) the Contractor (as employer), shall establish one or more health and safety committee(s) where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, and to make recommendations regarding health and safety to the Contractor and to keep record of meetings, recommendations and reports made by the committee.

Competent Persons

In accordance with the Construction Regulations the Contractor shall appoint, in writing, competent persons responsible for supervising construction work for the work situations that may be expected on the site of the works (Regulation 7 to 28).

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

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

12. CONTRACTOR'S RESPONSIBILITIES

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) to confirm his status as mandatory (Contractor) for the contract under consideration.

The Contractor's duties and responsibilities are clearly set out in the Construction Regulations 2003, and are not repeated without relieving the Contractor of any of his duties and responsibilities in terms of the Construction Regulations.

In addition, the Contractor shall also comply with the requirements of the Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA) and to this effect shall submit a letter of good standing with the compensation Insurer to the Client before work on site commences.

13. PROJECT / SITE SPECIFIC REQUIREMENTS

The following is a list of specific activities and considerations that have been identified for the project and the construction site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Principal Contractor.

- Hazardous traffic conditions during patching, resurfacing and road marking operations
- Working safely with bituminous products
- Working safely with Plant and equipment.

14. ARRANGEMENTS FOR MONITORING AND REVIEW

The Client will conduct a Monthly Audit to audit compliance with Construction Regulation 4 (1) (d) to ensure that the Contractor has implemented and is maintaining the agreed and approved OH&S Plan.

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

A representative of the Contractor shall accompany the Client 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.

SCHEDULE A

SAFETY FILE EVALUATION SHEET

Contractor: _____

Reg No.: _____ Date: _____

No.	Item	Reference	Comment
1	Copy of OHS Act [85 of 1993]	Gen. Admin Regs.	
2	Valid Compensation Commissioner Documents	C.O.I.D.A / Constr. Regs.	
3	Section 37(2) Agreement	Sect. 37 (2)	
4	Health and Safety Spec's (provided by client)	Constr. Regs	
5	Tender Documentation	Constr. Regs	
6	Health and Safety Plan	Constr. Regs	
7	Risk Assesments (Compentent person)	Constr. Regs	
8	Appointment letters	Sect. 16,17. Gen. Mach Reg	
9	Notification of Construction work (D.O.L.)	Constr. Regs. 3	
10	Inspection rigisters / checklists	Environ. Regs. 6	
11	Certificates of Compliance (Electrical Installations)	Elect. Inst. Regs. 3	
12	Monthly Audit reports	Sect. 18 (2)(f)	
13	Drawings and Designs	Constr. Regs	
14	Fall Protection Plans	Constr. Regs. 8	
15	Detailed Structural Engineering survey (structures to be demolished)	Constr. Regs. 12	
16	Examination and Test records of equipment (where applicable)	Constr. Regs. 15	
17	Personal Protective Equipment records	Sect. 8 (2)(b)	
18	Training records	Sect. 8, HCS Regs.	
19	Minutes of OHS Committee meetings	Sect. 19	
20	Tunneling Regulations (where tunneling is done)	Constr. Regs. 13	

21	Material Safety Data Sheets (where applicable)	Gen. Admin Regs.	
22	Annexure 1's (Incident recording forms)	Sect. 14 , Gen. Safe. Reg.	
23	Incident Investigation reports & notifications thereof	Sect. 24	
24	Maintenance plans for machinery and equipment	Sect. 8(2)(a)	
25	Medical records	H.B.A Regs. 9(2)	
26	Emergency contact details	Constr. Regs	
27	Evacuation plans	Environ. Regs. 3(5)(a)	
28	Safe Work Procedures	Gen. Safe. Regs. 13	
29	Inspection records of Designers	S.A.B.S. 085	
30	Certificates of System design (suspended scaffolding) together with proof of notification to DOL	S.A.B.S. 085	

ANNEXURE B: DRAWINGS FOR TENDER PURPOSES