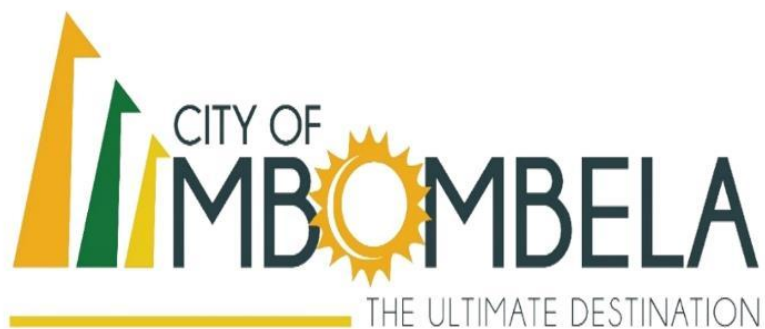




UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6km)

TENDER NUMBER: COM94/2026

TENDERER:	
------------------	--

CLOSING DATE: 13 AUGUST 2026 AT 11:00AM

CSD REG NUMBER: MAAA.....

CLIENT	ENGINEER
 City of Mbombela PO Box 45 Mbombela 1200 Tel: 013-759 2358 Fax: 013-753 4444	 Rasik Consulting Engineers Office No. 1 Rothery Street Mbombela 1200 Tel: 013 755 3230

UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6KM)

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 relevant 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, August 2019, 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. | COTO | <i>Standard Specifications for Road and Bridge Works for State Road Authorities (2020)</i> |
| 7. | This Document, as presented. | |
| 8. | CIDB BUILD Programme | |

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T1.1 TENDER NOTICE AND INVITATION FOR PROPOSALS

Bids are hereby invited from experienced services providers for **UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANAYAMAZANE (6km)**

Tender No	Description	CIDB Grading	Compulsory Meeting and Site Inspection Date	Closing Date
COM 94/2026	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANAYAMAZANE (6km)	8CE OR HIGHER	21 JULY 2026 AT 10:00 AM, VUKUZIMELE STREET & D2296 INTERSECTION, GPS COORDINATES: 25°29'56.00"S 30°42'38.35"E	13 AUGUST 2026 AT 11:00

It is compulsory that service providers download a copy of the bid document that will ONLY be available as from 10 July 2026 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 STATEMENTS FOR BOTH THE COMPANY AND ITS DIRECTORS FROM RELEVANT LOCAL AUTHORITY OR PROOF OF RESIDENCE FROM A TRIBAL AUTHORITY OR LEASE AGREEMENT ACCOMPANIED WITH THE LESSOR'S MUNICIPAL RATES AND TAXES STATEMENTS, 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: "BID NO.: COM 94/2026, UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6KM), CLOSING DATE: 13 AUGUST 2026" 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 90 points will be allocated in respect of price and 10 points in respect of Targeted Goals

Procurement Enquiries	:	Christopher Nkambule	(013) 759 2358
Technical Enquires	:	Rudolph Mashego	(013) 759 2190
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
	The conditions of tender are those contained in the latest edition of SANS 10845-3, Construction Procurement – Part 3: Standard conditions of tender. 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. Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.
3.1	The Employer is: City of Mbombela, 1 Nel Street, Mbombela, 1200
3.2	The tender documents issued by the Employer comprise: THE TENDER Part T1 Tendering Procedures Part T1.1 Tender Notice and Invitation to Tender (white) Part T1.2 Tender Data (pink) Part T1.3 Preferential Procurement Policy of City of Mbombela (pink) Part T2 Returnable Documents Part T2.1 List of Returnable Documents (yellow) Part T2.2 Returnable Schedules to be completed by the Contractor (yellow) Part T2.3 Returnable Schedules II (yellow) THE CONTRACT Part C1 Agreement and Contract Data C1.1 Form of Offer and Acceptance (pink) C1.2 Contract Data (yellow) C1.3 Form of Guarantee (white) C1.4 Agreement in terms of Occupational Health and Safety Act, 1993 (white) C1.5 Authority for Signatory in Terms of OH&S Act, 1993 (white) Part C2 Pricing Data C2.1 Pricing Assumptions (yellow) C2.2 Bill of Quantities and Information Sheets (yellow)

	Part C3 Scope of Works C3.1 Scope of Works (blue) C3.2 Engineering (blue) C3.3 Procurement (blue) C3.4 Construction (blue) C3.5 Management (blue) C3.6 Health and Safety (blue) Part C4 Site Information C4 Site Information (green) Appendices Annexure A Health and Safety Specification (white) Annexure B Drawings for Tender Purposes (white)										
3.4	The Employer's Agent is: Name: Rasik Consulting Address: Office No.: 1 19 Rothery Street, Mbombela 1200 Tel: 013 755 3230 E-mail: info@rasikconsulting.co.za										
3.5	The language for communications is English.										
3.6	The competitive negotiation procedure shall not be applied.										
4.1	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: a) CIDB registration 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 8CE or higher of construction work, are eligible to have their tenders evaluated. 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. 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. <table border="1"> <thead> <tr> <th>Category of tender</th><th>Upper limits per CIDB Table 8 Regulation 17</th></tr> </thead> <tbody> <tr> <td>CE 5</td><td>R10m</td></tr> <tr> <td>CE 6</td><td>R20m</td></tr> <tr> <td>CE 7</td><td>R60m</td></tr> <tr> <td>CE 8</td><td>R200m</td></tr> </tbody> </table>	Category of tender	Upper limits per CIDB Table 8 Regulation 17	CE 5	R10m	CE 6	R20m	CE 7	R60m	CE 8	R200m
Category of tender	Upper limits per CIDB Table 8 Regulation 17										
CE 5	R10m										
CE 6	R20m										
CE 7	R60m										
CE 8	R200m										

	Joint Ventures are eligible to submit bids provided that: (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 8CE or Higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. (3) the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 8CE or Higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.
	b) Key Personnel 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. 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. 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. Where the Contracts Manager will not be employed on the Works full time, his powers will be delegated to the approved construction manager. Failure to comply with the requirements or to complete Form T may render the tender non-responsive.
4.6	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. Failure to apply instructions contained in addenda may render a tenderer's offer non- responsive in terms of Condition of Tender 5.8.

4.7	The arrangements for the compulsory clarification meeting are as stated in the tender notice and invitation to tender. 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. 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: (a) read out from the collected lists calling for confirmation that all have signed; 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. 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 take responsibility for incorrect information provided by the bidder on the attendance register.
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.
	An alternative tender offer will only be considered if a main tender offer, strictly in accordance with all the requirements of the tender documented is also submitted. If the tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrate the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.
4.12	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. Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements. The modified 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.
4.13.1	Parts of each tender offer communicated on paper shall be submitted as an <u>original</u>, no copies are required. The signed print-out shall be taken as the valid submission.

4.13	The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:
4.15	Location of tender box: City of Mbombela
	Physical address: 1 Nel Street, Mbombela 1200
	Identification details: Bid No.: COM 94/2026, UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6km)
	Tenders can be submitted 24 hours a day from Monday to Friday at the Employer's address.
	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.
4.13.4	The tenderer is required to submit all certificates as listed in the Schedule of Tender Compliance (Form U).
4.13.5	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 authorized representative's name, the tenderer's postal address and contact telephone numbers.
4.13.5	A two-envelope procedure will not be followed.
4.13.6	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
4.15	The closing time for submission of tender offer is as stated in the Tender Notice and Invitation to Tender.
4.16.1	The tender offer validity period is 120 days.
4.16.2	Where a tenderer, at any time after the opening of his tender offer but prior to entering into a contract based on his tender offer: a) withdraws his tender; b) gives notice of his inability to execute the contract in terms of his tender; or c) fails to comply with a request made in terms of 4.17, 4.18 or 5.9, such tenderer shall be barred from tendering on any of the Employer's 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.
4.18	Any additional information requested under this clause must be provided within 5 (five) working days of date of request.
4.20	The tenderer is required to submit with his tender a letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Part C1.8 of this Procurement document.
5.1	The employer shall respond to clarifications received up to 7 working days before tender closing time.
5.2	The employer shall issue an 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	Arithmetical errors, omissions, discrepancies and imbalanced unit rates Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount appearing in the summary to the Pricing Schedule shall govern. Check responsive tender offers for: - the gross misplacement of the decimal point in any unit rate; - omissions made in completing the pricing schedule or bills of quantities; or - arithmetic errors in: - line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or - the summation of the prices. - imbalanced unit rates. Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers. Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows: - 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. - 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. - Where the unit rates are imbalanced adjust such rates by increasing or decreasing them and selected others while retaining the total of the prices derived after any other corrections made under (a) and (b) above. Where there is an omission of a line item, no correction is possible, and the offer may be declared non-responsive. Declare as non-responsive and reject any offer from a tenderer who elects not to accept the corrections proposed and subject the tenderer to the sanction under 4.16.2. The tenderer is required to submit balanced unit rates for rate only items in the pricing schedule. The rates submitted for these items will be taken into account in the evaluation of tenders.
5.10	List of disqualifying factors of this tender are as follows: 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 - 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 (in line with the Companies ACT) Failure to provide for all the service Providers will result in disqualification. • Submit copy of an active CIDB contractor grading designation of 8CE or higher. For JV, a combined CIDB grading is required. • The bidder must submit a valid and current municipal rates and taxes statement from the relevant local authority, or proof of residence from a recognised tribal authority (where applicable), or a valid lease agreement accompanied by the lessor's up-to-date municipal rates and taxes statement for the business premises. Bidders must ensure that the physical address details reflected on the Central Supplier Database (CSD) correspond with those on the company registration certificate. The Municipality reserves the right to verify municipal rates and taxes information linked to both CSD and company registration details. It remains the responsibility of bidders to ensure that municipal accounts are fully compliant and not in arrears. • The bidder must submit valid and current municipal rates and taxes statements for all director(s), including consortium or joint venture partners or proof of residence from a recognised tribal authority (where applicable), or lease agreements accompanied by up-to-date municipal rates and taxes statements. The Municipality may verify, using directors' identity numbers, whether any municipal rates and taxes are outstanding. It is the responsibility of bidders to ensure that all directors are fully compliant with municipal rates and taxes obligations. • Letter of good standing for COIDA. The letter of good standing must reflect the relevant nature of business as stipulated in the Classification of Industries, the Compensation for Occupational Injuries and Diseases Act 130 of 1993. • Letter of intent for performance guarantee for 10% of the value of works from a registered Financial Service Provider (FSP). The letter should have full contact details of the service provider and the FSP number. • Proof of public liability Insurance / third party liability insurance for a minimum of R5 000 000.00. The letter must be issued by a registered insurance service provider. The letter should have the full contact details of the service provider and the underwriter. NB: Failure to apply instructions contained in addenda that may be issued will result to immediate disqualification. Submissions from bidders who did not attend a compulsory briefing session will not be acceptable (if applicable). 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.
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5.11	The procedure for the evaluation of responsive tenders is Method 2: Functionality, price and preferences. Method 2 Functionality, price and preferences is scored as follows: a) Score each tender in respect of the financial offer made and preferences claimed, if any. b) Calculate the total number of tender evaluation points (TEV) in accordance with the following formula: $TEV = NFO + NP + NQ$
5.11.5	where: NFO is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7; NP is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8. NQ is the number of tender evaluation points awarded for quality claimed in accordance with F.3.11.9. c) Rank tender offers from the highest number of tender evaluation points to the lowest. d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so. e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub-clause is repeated. f) Compelling and justifiable reasons not to recommend a tenderer are inter alia tenderers who: - do not meet the minimum requirements listed in Part T2.1, List of Returnable Documents and/or - failed to complete the tender document comprehensively with all the required information.
5.11.7	The financial offer will be scored using the following formula: $N_{FO} = W_1 \times A$ Where: N_{FO} = the number of evaluation points awarded for the financial offer W_1 = the maximum possible number of bid evaluation points awarded for the financial offer and will be: (i) 90 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of R 50,000,000; or (ii) 80 where the financial value inclusive of VAT of one or more responsive tender offers equals or is less than R 50,000,000. A = the number calculated using Formula 2 (Option 1) Table 1: Formulae for calculating the value of A_a

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a
1	Highest price or discount	$A = (1 + \frac{(P - P_m)}{P_m})$	$A = P / P_m$
2	Lowest price or percentage commission /fee '	$A = (1 - \frac{(P - P_m)}{P_m})$	$A = P_m / P$

a P_m is the comparative offer of the most favorable comparative offer.
P is the comparative offer of the tender offer under consideration.

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 Broad-Based Black Economic Empowerment Act (B-BBEE, Act 53 of 2003) and 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 (90/10 system)
1.	100% Black owned enterprises within the definition of the HDI	1
2.	At least 30% women owned enterprises	1
3.	At least 30% youth owned enterprises	1
4.	At least 30% enterprises people living with disabilities	1
5.	Enterprises regarded as EMEs located within the City of Mbombela	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)	1
7.	Corporate Social Investment (CSI) Plan. (see notes below)	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	1
Total		10

Eligibility for preference points will be determined as follows:

☐ Compliance with any other information requested to be attached to Returnable Schedule Form D.

5.11.9

Description of quality criteria	Maximum number of points
Plant and equipment	15
Key Personnel	25
Company Experience	50
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.

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). Company Experience (**Maximum 50 points**)

Details of paved surface roads 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	In addition to the requirements of the Condition of Tender, offers will only be accepted if: - 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. - the tenderer is in good standing with SARS according to the Central Supplier Database. - the tenderer submits an Original letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Form S of this procurement document. - 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: 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?	YES
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?	N/A

3.	Certification of documents to be submitted together with the tender document. i.e. ID Copies of business owners, qualifications, Licenses and certificates, accreditation by professional bodies, proof of ownership document, appointment letters, completion certificates, etc.	a) The certification of documents must be done by a commissioner of oath as prescribed in the Justice of the Peace and Commissioners of Oaths Act 16 of 1963 and its Regulations. b) Acceptable certified copies are copies originally certified from any police station, post office, Lawyers or notary public (who are members of a recognized professional body), Actuaries or accountants (who are members of a recognized professional body), Members of the judiciary, Directors, managers or company secretaries of a banks or regulated financial services business. c) <i>Commissioner of Oaths stamps can be purchased at Stationary shops, but it can be custom made following the below example:</i> CERTIFIED TRUE COPY OF THE ORIGINAL DOCUMENT. THERE ARE NO INDICATIONS THAT THE ORIGINAL DOCUMENT HAS BEEN ALTERED BY UNAUTHORISED PERSONS. Designation (rank) ex officio: RSA Date: Place Business Address: Commissioner of Oaths Signature Full Names NB: All certified copies must NOT exceed three months and be originally certified.	Has the bidder certified all documents to be certified as per special conditions of bid? Check validity on the date, check if the commissioner of oaths stamp is compliant as per example copied from the Regulations.	YES
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4.	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.	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.	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?	YES
5.	Tax Compliant Status (TCS)	a) Prospective bidders are required to attach a valid TCS together with the tender document.	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 the timeframe stated above (See MFMA Circular No: 90).	YES

6.	Certified copy of B-BBEE Certificate / affidavit for B-BBEE status level of contributor (to claim points only).	a) EMEs in terms of the B-BBEE Act 53 of 2003 may submit a sworn affidavit confirming annual total revenue and level of black ownership or Certified Copy of B-BBEE Certificate. 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. 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. 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>	Is the copy B-BBEE Certificate valid? Is the sworn affidavit for EME / QSE in line with the threshold for EME and EME and valid? 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? Is the copy of B-BBEE certificate certified by the Commissioner of Oaths reflects as prescribe on the regulations of the Act? Is the affidavit for B-BBEE stamped and signed by commissioner of oaths? I.e. full names and signature, force/practice number, designation / rank, date and address. Is the certification date not older than 3 months and original ink is clear on the document to confirm if it is originally certified?	YES
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?	YES
8.	In bids where Consortia / Joint Ventures / Sub-contractors are involved,	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	YES

	each party must submit separate required returnable documents.		required documents as per special condition of bid?	
9.	Latest municipal rates and taxes certificates from relevant local authority for the business and all business directors OR Proof of resident from tribal authority for the business and all business directors OR Lease agreement with the Lessor's latest municipal rates and taxes certificates from relevant local authority. NB: All accounts owing any municipality for more than 90 days will be disqualified as prescribed on the MSCM Regulations.	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. 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. 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 leased is in a rural area, lease agreement will be accompanied with the lessor's proof of residential from a tribal authority. 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. 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. The rationale behind this requirement is the enhance revenue in RSA municipalities as enshrined on the Municipal Systems Act 32,	Has the bidder attached latest municipal rates and taxes from relevant local authority for the company / business and all company directors / owners? 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? Is the account not in areas for more than 90 days (3 months)?	YES

		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.		
10.	<u>Forging of documents/certificates</u> The City has noted that prospective bidders are allegedly submitting fraudulent and forged documents when bidding for tenders. 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 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).	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>. 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>.	Are there any suspicious / alleged fraudulent or forged documents? If yes, has the matter been reported to the nearest SAPS following correct institutional protocol? Has the matter been registered with the Registrar to enable due processes and per the Act? NB: The minutes of the BEC / BAC should detail all the elements of alleged fraud and forged documents.	YES
11.	Copy of Public Liability insurance. Only insurance	Public liability insurance may vary from one project to another on the basis of the level of risk and complexity of the project.	If applicable, is the bidder compliant with the minimum cover	YES

	covers from registered and authorized financial service providers will be accepted.	Minimum cover to be determined by the BSC prior consultation with the project manager if deemed necessary.	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: - 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.	YES
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 the provision of the Act.	a) Applicable to private companies with a public interest score of less than 100. 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 have its annual financial statements audited or independently reviewed. 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.	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 on MBD 5?	YES
14.	Functionality / Quality for evaluation of complex projects	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.	Has the bidder met the minimum threshold on functionality in order to qualify for further evaluation on price and B-BBEE? Has the bidders been scored in line with the evaluation criteria set on the tender document? All portfolio of evidence attached and certified as stated on the bid	YES

		NB: Functionality will not be compulsory for all projects but for complex projects. Functionality criteria will vary from one project to another.	document?	
15.	The Compensation for Occupation Injuries and Diseases Act 130 of 1993 (COIDA)	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.	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?	YES

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	MANAGERIAL CAPACITY, KEY PERSONNEL EXPERIENCE AND QUALIFICATIONS
FORM U	METHOD STATEMENT
FORM V	SOCIAL DEVELOPMENT PLAN
CERTIFICATE FOR TENDER COMPLIANCE	
FORM W	SCHEDULE OF TENDER COMPLIANCE

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 90/10 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) Price; and
- (b) Specific Goals.
- 1.4 **To be completed by the organ of state:**
- The maximum points for this tender are allocated as follows:
- | | POINTS |
|--|------------|
| PRICE | 90 |
| SPECIFIC GOALS | 10 |
| 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:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \\
 Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right) & \text{or} & Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)
 \end{array}$$

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:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \\
 Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right) & \text{or} & Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)
 \end{array}$$

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 (90/10 system)	Number of points claimed (90/10 system) (To be completed by the tenderer)
1.	100% Black owned enterprises within the definition of the HDI	1	
2.	At least 30% women owned enterprises	1	
3.	At least 30% youth owned enterprises	1	
4.	At least 30% enterprises people living with disabilities	1	
5.	Enterprises regarded as EMEs located within the City of Mbombela	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)	1	
7	Corporate Social Investment (CSI) Plan. (see notes below)	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	1	
Total		10	

The City will utilise 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.

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

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

5 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 witness Signature of witness

Note:

- 1) Failure to complete the declaration will lead to the rejection of a claim for a preference.
- 2) 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) (GBD 4)

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 | ☐ | | |
| c) a member of the National Assembly or the National Council of Province | ☐ | member of an accounting authority of any national or provincial public entity | ☐ |
| 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 (tick appropriate column)	
		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 | ☐ | | |
| f) a member of the National Assembly or the National Council of Province | ☐ | member of an accounting authority of any national or provincial public entity | ☐ |
| 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 (tick appropriate column)	
		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. Certified Copies of the ID's of the partners

OR

- **One person Business / Sole trader**

2. Certified 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**

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:
- prices;
 - geographical area where product or service will be rendered (market allocation)
 - methods, factors or formulas used to calculate prices;
 - the intention or decision to submit or not to submit, a tender;
 - the submission of a tender which does not meet the specifications and conditions of the tender; or
 - 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 (MBD 2)**ATTACH VALID TAX COMPLIANCE STATUS (TCS)
PIN TO THIS PAGE**

The Tax Compliance Status (TCS) PIN 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	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? (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). The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	Is the 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)? for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
4.2.1	If so, furnish particulars:		
4.3	Was the 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 ☐	No ☐
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 ☐	No ☐
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 ☐	No ☐
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:

.....

- i. Affix Proof of the National Treasury Central Supplier Database to this page***
- ii. (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 subcontractors. Should any or all of the specialist subcontractors 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 subcontractor 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 the 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).

i. 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 Durations (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 (roads) 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 **5 points** per project with a value from R10 million but less than R30 million, completed in the last 5 years.
- 3 The tenderer scores **8 points** per project with a value from R30 million but less than R50 million completed in the last 5 years.
- 4 The tenderer scores **10 points** per project with a value of R50 million and above completed in the last 5 years.
- 5 Projects of less than R10million attract **(0) zero points**.
- 6 The tenderer may attach not more than 5 projects of similar nature and size.
- 7 The maximum Quality points for each criterion are listed below.
- 8 Points will be given only for appointment letter, completion certificates and reference letter for each project.
- 9 Failure to submit all relevant information per project will result in the forfeiture of all points for that relevant project.
- 10 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.
- 11 Documents requested above must be certified and not older than 3 months. Failure to adhere to the directive zero points will be allocated.

NB: Similar project (construction of roads excluding maintenance)

Certified Appointment letter as well as Completion Certificate (signed by client, contractor and engineer) of Relevant Work (to be attached – zero points if any 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: 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 start of contract maximum points will be as stated in allocated points if owned column.
 - 50% 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 Quantities 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**). The invoice must be in the name of the bidding company or director(s) (where applicable*).

Description, size, capacity, etc.	Allocate Points if owned	Allocated points if hired	Quantity Required	Quantity owned	Points Scored
Motor grader (Cat 14H or Similar)**	4	2	1		
Excavator (20 ton)*	2	1	1		
Smooth Drum Vibratory Roller (10 ton or above)*	1	0.5	1		
Tamping Foot Vibratory Roller (10 ton or above)*	2	1	1		
Water Tanker (8000 Litre)**	2	1	1		
Tipper Truck (10 m ³ or above)**	2	1	4		
TLB (48 kw Capacity)**	2	1	1		
Total	15.0	7.5			
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.

Bank Rating	Points (Max 10)
A= 10 points	10
B= 8 points	8
C= 6 points	6

NB: the bank rating must be based on the amount reflected on the form of offer. No points will be allocated on the rating below the tendered amount. The City reserves the right to verify the information with the Financial Service Provider. In case of a JV, Consortium or partnership only the details of the lead partner will be considered

DETAILS OF TENDERERS BANKING INFORMATION

Notes to tenderer:

- 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:											
BANK RATING											
How long has this account been in existence:	<table border="1"> <tr> <td>0-6 months</td> <td></td> </tr> <tr> <td>7-12 months</td> <td></td> </tr> <tr> <td>13-24 months</td> <td></td> </tr> <tr> <td>More than 24 months</td> <td></td> </tr> </table>	0-6 months		7-12 months		13-24 months		More than 24 months		(Tick which is appropriate)	
0-6 months											
7-12 months											
13-24 months											
More than 24 months											

**ATTACH HERETO AN ORIGINAL LETTER FROM THE BANK TO THIS PAGE NOT
OLDER THAN THREE (3) MONTHS**

**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 then 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

*The Tenderer must attach hereto an **Original Letter** from a 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

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. 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.
3. For all personnel listed provide ID and for all foreign nationals must attach SAQA accreditation and certified proof of work permit

CONSTRUCTION PERSONNEL

i) Contract manager (5 points)

Contract manager is required to have a minimum of NQF Level 7 in Civil engineering or equivalent and a minimum of 10 years in roads construction and who is registered with SACPCMP and Pr. CM or ECSA as Pr.Eng or Pr.Tech.Eng shall be required as a minimum, as indicated below:

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

ii) Site Agent (10 points)

Site Agent is required to have a minimum of N.D Civil engineering or equivalent to a NQF 6 qualification and a minimum of 10 years in roads construction, as indicated below:

EXPERIENCE IN ROADS CONSTRUCTION	10	11	12	13	14
POINTS	2	4	6	8	10

iii) Site Foreman (5 points)

Site Foreman on permanent/contract basis, with at least NQF 4 qualification or related qualification with experience in road projects of not less than ten (10) years. Points will be allocated on a pro-rata basis with a minimum experience of 10 years, as indicated below:

EXPERIENCE IN ROADS CONSTRUCTION	10	11	12	13
POINTS	2	3	4	5

iv) **Safety Officer (5 points)**

Safety officer on permanent/contract basis, to have a minimum qualification of Safety Management Training Course (SAMTRAC) or National Diploma in Safety Management or equivalent minimum NQF LEVEL 5 qualification with a valid certificate issued by SACPCMP for registration CHSO and with experience in road 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 IN ROADS CONSTRUCTION	3	4	5
POINTS	2	3	5

Experience	Points
Provide detailed CVs, certified copies of identity documents and certified copies of qualifications for all Key Personnel for each category stated above.	25

N.B Points to be allocated based on the CV's 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 zero points.

All certificates, appointment letters of company experience, completion certificates of company experience, proof of ownership on construction 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.

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

Note: Only ID,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 ALLOCAT ED	POINTS CLAIMED BY TENDERE R	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 number will proceed to the price and preference evaluation stage.

SUPPLY CHAIN POLICY USING 90/10 PREFERENCE POINT SYSTEM

Description	MAXIMUM POINTS TO BE ALLOCATED
Price	90
Specific Goals	10
TOTAL	100

FORM W: 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	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	

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	PAGE(S)
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C1.2 FORM OF ACCEPTANCE	80
C1.3 SCHEDULE OF DEVIATIONS	81
C1.4 CONTRACT DATA	82 - 88
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C1.1 FORM OF OFFER

C1.2 FORM OF ACCEPTANCE

C1.3 SCHEDULE OF DEVIATIONS

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: **UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6km)**

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

Signature: _____

Name: _____

Capacity: _____

for the EMPLOYER

Name: _____

Signature: _____

Date: _____

Capacity: _____

Witness:

Name: _____

Signature: _____

Date: _____

C1.4 **CONTRACT DATA**

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 are applicable to this Contract:

Clause	Description								
1.1.1.13	The Defects Liability Period is 12 months								
1.1.1.14	The time for achieving Practical Completion is 18 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 Rasik Consulting (Pty) Ltd								
1.1.1.26	The pricing strategy: Re-Measurement Contract								
1.2.1.2	The Employer's address for receipt of communications is: <table> <tr> <td>Physical address: 1 Nel Street MBOMBELA 1200</td><td>Postal address: PO Box 45 MBOMBELA 1200</td></tr> <tr> <td>Telephone: 013 759 2190</td><td></td></tr> <tr> <td>Fax: N/A</td><td></td></tr> <tr> <td>E-mail: rudolph.mashego@mbombela.gov.za</td><td></td></tr> </table>	Physical address: 1 Nel Street MBOMBELA 1200	Postal address: PO Box 45 MBOMBELA 1200	Telephone: 013 759 2190		Fax: N/A		E-mail: rudolph.mashego@mbombela.gov.za	
Physical address: 1 Nel Street MBOMBELA 1200	Postal address: PO Box 45 MBOMBELA 1200								
Telephone: 013 759 2190									
Fax: N/A									
E-mail: rudolph.mashego@mbombela.gov.za									
1.2.1.2	The address of the Employer's Agent is: <table> <tr> <td>Physical address: Office No.: 1 19 Rothery Street Mbombela 1200</td><td>Postal address: Office No.: 1 19 Rothery Street MBOMBELA 1200</td></tr> <tr> <td>Telephone: 013 755 3230</td><td></td></tr> <tr> <td>E-mail: info@rasikconsulting.co.za</td><td></td></tr> </table>	Physical address: Office No.: 1 19 Rothery Street Mbombela 1200	Postal address: Office No.: 1 19 Rothery Street MBOMBELA 1200	Telephone: 013 755 3230		E-mail: info@rasikconsulting.co.za			
Physical address: Office No.: 1 19 Rothery Street Mbombela 1200	Postal address: Office No.: 1 19 Rothery Street MBOMBELA 1200								
Telephone: 013 755 3230									
E-mail: info@rasikconsulting.co.za									
2.4	Variations to the Conditions of Contract are: Add the following at the end of sub clause 2.4.1: " The several documents forming the Contract shall rank in the following order of precedence: 1. Contract Agreement, 2. Form of Offer and Acceptance,								

Clause	Description
	3. Contract Data, 4. Specification Data, 5. Standardized Specifications, 6. Drawings, 7. Bill of Quantities, 8. Statutory Regulations, 9. Other standard specifications. 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."
4.3.3	Add the following at the end of sub clause 4.3.2: "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: (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. The Contractor shall furthermore, in compliance with Constructional Regulations 2014 to the Act (vi) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, 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." 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). The following arrangements and procedures will apply: (i) The Contractor shall himself obtain the Mining Authorization for the sites. (ii) 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 (2015). (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, by all his sub-contractors whether or not selected and/or approved by the Employer.
5.3.1	The documentation required before commencement with Works execution are: • 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	The time to submit the documentation required, before commencement with Works execution is 14 calendar days.
5.4.2	The access and possession of site shall not be exclusive to the Contractor.
5.8.1	The non-working days are public holidays and Sundays. The special non-working days are: The year-end break from 11-Dec-2026 to 04-Jan-2027 OR AS PER SAFCEC To Be Announced

Clause	Description
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	The requirements for achieving Practical Completion are as stated in General Conditions of Contract 2015. Practical completion is reached when: • The Road has been fully constructed and paved, including junctions and bus-stops. • Drainage structure completed. • Pre-markings for road markings completed and vehicles can pass in a safe manner. • All road signs in place. • Erosion protective measures completed. • Borrow pit and spoil sites rehabilitated. The Contractor should be able to reach Completion within 30 days from receiving the certificate of practical completion.
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 subcontractor's profits, timekeeping, clerical work, insurance, establishment, superintendence and the use of hand tools is 15% .
6.8.2	This contract does include for contract price adjustment
6.8.3	Price adjustments for variations in the costs of special materials are 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 .
10.7.2	The value of payment certificates is to be adjusted in accordance with the Contract Price Adjustment Schedule, where The value of "x" is 0,150 The values of the co-efficients are: $(1-x) \left[\frac{aL_t}{L_o} + \frac{bE_t}{E_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$

	CPA : Estimate more than R10 000 000. <table><tr><td>New Road Construction</td><td>Rehabilitation</td><td>Labour Intensive</td></tr><tr><td>x = 0,150 ...</td><td></td><td>...</td></tr><tr><td>a = 0,25</td><td>0,26</td><td>0.42</td></tr><tr><td>b = 0,30</td><td>0,30</td><td>0.40</td></tr><tr><td>c = 0,37</td><td>0,37</td><td>0.13</td></tr><tr><td>d = 0,08</td><td>0,07</td><td>0.05</td></tr></table> “L” is the “Labour Index” and shall be the “Consumer Price Index” for the urban area specified in the Contract, as published in the Statistical Release P0141.1 in table 21 of Statistics South Africa. “P” is the “Plant Index” and shall be the “Civil Engineering Plant” index as published in the Statistical Release P0142.1 in table 16 of Statistics South Africa. “M” is the “Materials Index” and shall be the price index for “Civil Engineering (Materials)” as published in the Statistical Release P0142.1 in table 15 of Statistics South Africa. “F” is the “Fuel Index” and shall be the index for “Civil Engineering” as published in Statistical Release P0142.1 Table 16 of Statistics South Africa. The suffix “o” denotes the basic indices applicable to the base month, which shall be the month prior to the month in which the closing date for the tender falls. The suffix “t” denotes the current indices applicable to the month in which the last day of the period falls to which the relevant payment certificate relates. If any index relevant to any particular certificate is not known at the time when the certificate is prepared, the Engineer shall estimate the value of such index. Any correction, which may be necessary when the correct indices become known, shall be made by the Engineer in subsequent payment certificates. The urban area nearest the site is City of Mbombela. The base month is June 2026 This contract will allow for contract price adjustment. The prices or rates shall be fixed for the first 12-month period determined from the tender base date and no change during this period will be allowed for escalation. On the 12-month anniversary date of the Contract base date the rates or sums shall be adjusted by the 12-month year on year CPI index (as published in the monthly bulletin PO141. of Statistics South Africa under table B) and fixed at this value for the following 12-month period. Subsequent 12-month periods shall be dealt with on the same basis.	New Road Construction	Rehabilitation	Labour Intensive	x = 0,150 ...		...	a = 0,25	0,26	0.42	b = 0,30	0,30	0.40	c = 0,37	0,37	0.13	d = 0,08	0,07	0.05
New Road Construction	Rehabilitation	Labour Intensive																	
x = 0,150 ...		...																	
a = 0,25	0,26	0.42																	
b = 0,30	0,30	0.40																	
c = 0,37	0,37	0.13																	
d = 0,08	0,07	0.05																	
10.7.3	The Works shall be completed within 18 months as envisaged by the employer.																		
Special Clause	The Contractor’s CIDB grading must remain active at the same of 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.																		
Special Clause	Thirty percent (30%) of the contract value shall be made NON-compulsory for subcontracting to local people/companies (CoM) irrespective of the <i>domicilium et excutandi</i> of the contractor. However contractors will be a allocated points for the																		

	proposal of social responsibility/social development plan (Form V of returnables) within CITY OF MBOMBELA
Special Clauses	“The Contractor shall submit a fully resource-loaded baseline programme within 14 days of the Commencement Date. The programme shall include: • procurement lead times, • critical path activities, • labour histograms, • plant allocation, • time risk allowances, • cash flow projections, • And community liaison activities. Monthly Recovery Programme “Where progress falls more than 10% behind programme, the Contractor shall submit a recovery programme within 7 days at no additional cost to the Employer.”
Special Clauses	“No work stoppages resulting from unlawful community interference, intimidation, or extortion shall automatically entitle the Contractor to compensation unless the Contractor demonstrates compliance with all stakeholder engagement procedures required by the Contract.”
Special Clauses	“The Contractor shall comply fully with the Environmental Management Programme (EMPr), Water Use Licence conditions, and all environmental authorisations.”
Special Clauses	“The Employer reserves the right to provide the Site in portions. No claim for standing time shall arise where access restrictions were identified in the tender documentation.”
Special Clauses	“Only abnormal rainfall exceeding the 1:10 year recurrence interval for the area, as confirmed by SAWS data, shall qualify as exceptional adverse weather.”
Special Clauses	“As-built drawings shall be updated monthly and submitted in both PDF and AutoCAD format before Practical Completion.”
Special Clauses	Contractor’s pricing shall be deemed to cover Site Security for day and night as per the provisions of COTO 2020, Chapter 1, Clause A1.2.3.17. The site security provision shall be deemed to cover the site camp (including Engineer’s facilities) and all temporary and permanent works.

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 constructed, **UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6KM)** and has accepted a Tender by the Mandatory for the construction, completion and maintenance 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 5.16.1 of the General Conditions of Contract (hereinafter referred to as "the GCC"),
 - (b) the date of termination of the Contract in terms of Clauses 9.1, 9.2 or 9.3 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 subcontractors.

(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 5.4 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 subcontractors, whether or not selected and/or approved by the Employer.

The Mandatory warrants that all his and his subcontractors' workmen are covered in terms of the Compensation

for Occupational Injuries and Diseases Act, 1993, which cover, shall remain in force whilst any such workmen

are present on site. A letter of good standing from the Compensation Commissioner to this effect must be

produced to the Employer upon signature of the agreement.

- 6 The Mandatory undertakes to ensure that he and/or subcontractors 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 subcontractors.

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER: _____

WITNESS 1 _____ 2 _____

NAME 1 _____ 2 _____

(IN CAPITALS)

SIGNED FOR AND ON BEHALF OF THE MANDATORY: _____

WITNESS 1 _____ 2 _____

NAME 1 _____ 2 _____

(IN CAPITALS)

**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 COTO Standardized Specification for Road and Bridge Works for State Authorities (2020 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 Contractor Skills Development Goals (CSDG)

The Contractor shall determine the Contract Skills Development Goal (CSDG), expressed in Rands, which shall not be less than the tender sub-total multiplied by a CSDG (%) given in Table 2 of the Standard for the applicable class of construction works. T

Table 1: Construction skills development goals for different classes of engineering and construction works contracts.

Class of construction works as identified in terms of the CIDB regulation		Construction Skills development goal (%)
Designation	Description	
CE	Civil Engineering	0.25
CE and GB	Civil Engineering and General Building	0.375
EB	Electrical Engineering work (Building)	0.25
EP	Electrical Engineering Works (Infrastructure)	0.25
GB	General Building	0.5
ME	Mechanical Engineering	0.25
	Specialized Works	0.25

Final Tender Summary Section

The contractor's attention is brought to the following: The Employer shall include a line item under the final tender summary section. (Described as "Minimum Contract Skills Development Goal (CSDG)" as illustrated in the Table 1.1 below:

To prevent a tender being non-responsive, the Contractor shall take note of the required CSDG percentage (%) as prescribed in the final tender summary section. The percentage (%) factor multiplied by the sub-total of the tender amount will determine the minimum CSDG that needs to be achieved on the contract.

Table 1.1 Final Tender Summary section– Contract Skills Development Goal Example

Item	Description	Percentage (%) factor	Sub-Total of Tender Amount	Amount (Rands)
16	Skills Development			
16.1	Minimum Contract Skills Development Goal (CSDG) Sum = CE (0.25%) x Subtotal of the tender amount	0.2 5	R60 000 000	R150 000

- 11 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 metre
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

C2.2: BILL OF QUANTITIES

SCHEDULE OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

SCHEDULE OF QUANTITIES

C1.2 GENERAL REQUIREMENTS AND PROVISIONS

Item No	Description	Unit	Quantity	Rate	Amount
C1.2	GENERAL REQUIREMENTS AND PROVISIONS				
C1.2.1	Environmental Management				
C1.2.1.1	Monitoring of compliance with and reporting on the EMP	month	18		
C1.2.1.2	Dedicated environmental officer	month	18		
C1.2.2	Programming and Reporting				
C1.2.2.1	Submission of a Scheme 1 Programme	Lump Sum	1		
C1.2.2.2	Reviewing and updating a Scheme 1 Programme	month	18		
C1.2.2.3	Submission of a Scheme 2 Initial Programme	Lump Sum	1		
C1.2.2.4	Submission of a Scheme 2 Full Programme	Lump Sum	1		
C1.2.2.5	Reviewing and updating a Scheme 2 programme every month	month	18		
C1.2.2.6	Preparation and submission of all information and reports specified in the Contract Documentation	month	18		
C1.2.3	Routine road maintenance of existing public roads within the Site of the Works or other public roads outside the Site of the Works which are used as detours				
C1.2.3.1	Grass cutting	ha	0,1		
C1.2.3.2	Drain cleaning	km	2,4		
C1.2.3.10	Watering of temporary gravel deviations and existing roads used as detours	kl	30		
C1.2.3.11	Other road maintenance work ordered by the Engineer	Prov Sum	1	R250 000,00	R250 000,00
C1.2.3.12	Handling cost, profit and all other charges in respect of item C1.2.3.11	%	R250 000,00	10%	R25 000,00
C1.2.4	Stakeholder Management and Liaison				
a)	Community Liaison officer (CLO)	Prov Sum	1	R200 000,00	R200 000,00
c)	Provision for accredited training				
	i) Generic Skills	Prov Sum	1	R400 000,00	R400 000,00
	ii) Entrepreneurial skills	Prov Sum	1	R400 000,00	R400 000,00
	iii) Handling and profit in respect of sub-items (i) and (ii) above	%	R800 000,00	10%	R120 000,00
	iv) Training Venue	Lump Sum	1		
d)	Student Training	Prov Sum	1	R300 000,00	R300 000,00
C1.2.5	Health and Safety				
C1.2.5.1	Health and safety plan	lump sum	1		
C1.2.5.2	Implementation of health and safety plan	month	14		
C1.2.8	Dayworks				
C1.2.8.1	Personnel				
(a)	Unskilled labourer	hour	20		
(b)	Semi-skilled labourer	hour	20		

(c)	Skilled labourer	hour	20		
(d)	Gang leader	hour	20		
(e)	Foreman	hour	20		
(f)	Skilled Artisan	hour	20		
C1.2.8.2	Construction equipment				
(a)	Motor grader (CAT 140G or similar)	hour	20		
(b)	Vibratory roller	hour	20		
(c)	Dozer (D7 or similar)	hour	20		
(d)	Front end loader	hour	20		
(e)	Tractor loader backhoe	hour	20		
(f)	Excavator	hour	20		
(g)	Compressor	hour	20		
CARRIED FORWARD					
Item No	Description	Unit	Quantity	Rate	Amount
BOUGHT FORWARD					
(h)	Water truck (min 10000l)	hour	20		
(i)	Tipper truck (min 10 ton)	hour	20		
C1.2.8.4	Materials				
(a)	Procurement of materials	Prov Sum	1	R300 000,00	R300 000,00
(b)	Contractor's handling costs, profit and all other charges in respect of item C1.2.8.4(a)	%	300000,00	10%	R30 000,00
C1.2.9	Disposal of non-useable assets				
C1.2.9.2	Disposal of non-useable assets not identified at time of tender	Prov Sum	1	R100 000,00	R100 000,00
C1.2.9.3	Handling cost, profit and all other charges in respect of item C1.2.9.2	%	120000,00	10%	R12 000,00
TOTAL CARRIED TO SUMMARY					

C1.3 CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

TOTAL CARRIED TO SUMMARY

C1.4 FACILITIES FOR THE ENGINEER

Item No	Description	Unit	Quantity	Rate	Amount
C1.4	FACILITIES FOR THE ENGINEER				
C1.4.1	Site accommodation				
PS C1.4.1.1	Offices and conference room	m ²	60		
C1.4.1.6	Car ports	No	6		
C1.4.1.7	Ablution unit (equipped as specified)	No	6		
C1.4.1.8	Change room with a shower	No	2		
C1.4.1.9	Kitchen unit (equipped as specified)	No	1		
C1.4.1.13	Rented housing paid for by the Contractor	Prov Sum	1	R1 000 000,00	R1 000 000,00
C1.4.1.14	Contractor's handling costs, profit and all other charges in respect of item C1.4.1.13	%	R 1 000 000,00	10%	R100 000,00
C1.4.3	Items measured by number				
C1.4.3.1	Office swivel chair	No	5		
C1.4.3.2	Office chair	No	20		
C1.4.3.5	Office desk with 3 drawers (at least one lockable drawer)	No	5		
C1.4.3.6	Typist desk (L-shaped)	No	1		
C1.4.3.8	Conference table	No	1		
C1.4.3.11	General purpose steel cabinet with shelves	No	3		
C1.4.3.12	Wall mounted pivot plan filing system	No	1		
C1.4.3.13	220/250 volt power outlet plug point	No	4		
C1.4.3.14	400/231 volt 3-phase power outlet plug point	No	4		
C1.4.3.15	Single 1 500 m, 58 watt fluorescent tube ceiling light	No	3		
C1.4.3.16	Single 1 500 mm, 22 watt LED tube ceiling light	No	3		
C1.4.3.17	11 watt compact fluorescent bulb ceiling light	No	1		
C1.4.3.18	7 watt LED bulb ceiling light	No	1		
C1.4.3.19	Wash-hand basin	No	1		
C1.4.3.23	Fire extinguisher 9,0 kg, dry powder type	No	1		
C1.4.3.24	Air-conditioning unit	No	4		
C1.4.3.25	Heater	No	4		
C1.4.3.26	Concrete specimen curing bath	No	1		
C1.4.3.27	Waste paper basket	No	1		
C1.4.3.29	A3 / A4 colour printer, copier, scanner	No	2		
C1.4.3.31	Rain gauge	No	1		
C1.4.3.33	Digital thermometer	No	1		
C1.4.3.36	Measuring wheel	No	2		
C1.4.3.37	First aid kit	No	1		

	CARRIED FORWARD				
Item No	Description	Unit	Quantity	Rate	Amount
	BOUGHT FORWARD				
C1.4.4	Prime cost items				
C1.4.4.1	Airtime, including pro-rata rentals, for calls made in connection with contract administration	PC Sum	1	R10 000,00	R10 000,00
C1.4.4.2	Handling costs and profit in respect of item C1.4.4.1	%	R10 000,00	10%	R1 000,00
C1.4.4.5	The provision of internet connectivity and WiFi data for Engineer's site staff	PC Sum	1	R15 000,00	R15 000,00
C1.4.4.6	Handling costs and profit in respect of item C1.4.4.5	%	R15 000,00	10%	R1 500,00
C1.4.4.7	The provision of paper and ink for a combination colour printer/copier/scanner	PC Sum	1	R10 000,00	R10 000,00
C1.4.4.8	Handling costs and profit in respect of item C1.4.4.7	%	R 10 000,00	10%	R1 000,00
C1.4.4.9	The provision of a complete 220/250 volt single phase electrical power installation, including all poles, insulators, wiring, switchboards, mains connections, meters etc.	PC Sum	1	R30 000,00	R30 000,00
C1.4.4.10	Handling costs and profit in respect of item C1.4.4.9	%	R30 000,00	R0,10	R3 000,00
C1.4.4.11	The provision of a complete 440/231 volt three phase electrical power installation, including all poles, insulators, wiring, switchboards, mains connections, meters etc.	PC Sum	1	R20 000,00	R20 000,00
C1.4.4.12	Handling costs and profit in respect of item C1.4.4.11	%	R 20 000,00	10%	R2 000,00
C1.4.4.13	Provision of a 440/231 volt three phase electricity generator if electricity from a power supply authority is not available on site	PC Sum	1	R55 000,00	R55 000,00
C1.4.4.14	Handling costs and profit in respect of item C1.4.4.13	%	R 55 000,00	10%	R5 500,00
C1.4.5	Services at site offices, laboratories and site accommodation				
C1.4.5.1	Fixed costs	lump sum	1		
C1.4.5.2	Running costs	month	18		
PS C1.4.4.17	Provision for Dispute Adjudication Board:				
a)	Provision for Dispute Adjudication Board (including appointment, meetings, reports, retainers, and possible hearings):	Prov Sum	1	R300 000,00	R300 000,00
b)	Handling Cost and profit in respect of item PS C1.4.8.7 a)	%	R300 000,00	10%	R30 000,00
	TOTAL CARRIED TO SUMMARY				

C1.5 TRAFFIC ACCOMODATION

Item No	Description	Unit	Quantity	Rate	Amount
C1.5	ACCOMMODATION OF TRAFFIC				
C1.5.1	Accommodation of pedestrian and non-motorised traffic				
C1.5.1.1	Accommodation of pedestrian and non-motorised traffic	month	18		
C1.5.2	Accommodation of vehicular traffic	month	18		
C1.5.5	Maintenance of temporary deviations (as ordered by the Employer's Agent in writing)				
C1.5.5.11	Other road maintenance work ordered by the Engineer	Prov Sum	1,00	R300 000,00	R300 000,00
C1.5.5.12	Handling cost, profit and all other charges in respect of item C1.5.5.11	%	R 300 000,00	10%	R30 000,00
C1.5.6	Removal of temporary deviations	km	1,00		
C1.5.7	Temporary traffic control facilities				
C1.5.7.1	Delineators including mounting bases and ballast:				
(b)	Double sided, reversible left or right (size indicated)	No	500,00		
C1.5.7.2	Traffic cones, minimum height 750 mm	No	150,00		
C1.5.7.3	Flagmen	man-shift	265,00		
C1.5.7.4	Traffic controllers	man-shift	265,00		
C1.5.7.5	Provision of illuminated traffic signs:				
(a)	Sign mounted flashing amber lights (2 lights with the specified power supply) mounted on a backing board which is:				
(i)	900 mm wide x 150 mm high	No	2,00		
(b)	Flashing LED illuminated arrow board	No	2,00		
(c)	Illuminated road sign – R & TR series (1200mm dia)	No	20,00		
(d)	Illuminated road sign – TW series (1500mm sides)	No	20,00		
C1.5.7.9	Cleaning of traffic control facilities	month	18,00		
C1.5.8	Traffic safety officer	Man-month	36,00		
C1.5.9	Traffic safety vehicle	month	18,00		
C1.5.11	Provision of safety equipment for visitors				
C1.5.11.1	Provision of reflective safety vests for visitors	No	20,00		
C1.5.11.2	Provision of hard hats for visitors	No	20,00		
C1.5.12	Additional traffic accommodation facilities ordered by the Engineer:				
C1.5.12.1	Provision of additional traffic accommodation facilities	Prov Sum	1,00	R300 000,00	R200 000,00
C1.5.12.2	Handling cost, profit and all other charges in respect of item C1.5.12.1	%	R300 000,00	10%	R20 000,00
TOTAL CARRIED TO SUMMARY					

C1.6 CLEARING AND GRUBBING

Item No	Description	Unit	Quantity	Rate	Amount
C1.6	CLEAR AND GRUBBING				
C1.6.1.1	Clearing				
(a)	Clearing with machines and some hand labour where necessary	ha	10,00		
(b)	Clearing with hand labour only when labour enhanced work is specified	ha	0,60		
(c)	Clearing of service trenches	m ²	200,00		
C1.6.2	GRUBBING				
C1.6.2.1	Grubbing with machines and some hand labour where necessary	ha	0,90		
C1.6.2.2	Grubbing with hand labour when labour enhancement work is specified or it is not practical to use a machine	ha	0,60		
C1.6.2.4	Grubbing by hand for service trenches	m ²	200,00		
C1.6.3	REMOVAL AND GRUBBING OF LARGE TREES AND TREE STUMPS				
C1.6.3.1	Girth equal to or exceeding 1,0 m up to and including 2,0 m	No.	20,00		
C1.6.4	REMOVAL OF BUILDING AND STRUCTURES				
C1.6.3.1	Removal of a car wash facilities adjacent to the road	Lump Sum	1,00		
PS C1.6.11	REMOVAL AND DISPOSAL SURFACES				
(a)	Removal of existing asphalt surfaces of upto 100mm thick (includes for disposal off site)	m ²	83 000,00		
(b)	Reinforced Concrete surfaces (upto a nominal depth of 150mm)	m ²	1 000,00		
(c)	Removal and disposal off site of the existing paver block (60 to 10mm thickness) surfacae:	m ²	1 100,00		
PS C1.6.12	REMOVAL AND DISPOSAL KERBING WITH THE CHANNELS				
(a)	Removal and disposal off site of the existing road edge kerbing (includes for disposal off site) (incl. Figure 3, 7 and 8 type kerbs)	m	1 500,00		
(b)	Removal and disposal off site of the existing garden kerbing (includes for disposal off site) (incl. Figure 10, 12 type kerbs)	m	1 500,00		
PS C1.6.13	REMOVAL AND DISPOSAL OF CULVERT INLETS AND OUTLETS STRUCTURES FOR THE FOLLOWING PIPE/ CULVERT ARRANGEMENTS:				
(a)	For Single barrel of 600mm diameter pipe	No	10		
(b)	For Double barrel of 600mm diameter pipe	No	2		
(c)	For Single barrel of 750mm diameter pipe	No	4		

(d)	For Tripple barrel of 750mm diameter pipe	No	2		
(e)	For Single barrel of 900mm diameter pipe	No	8		
(f)	For Single barrel of 1200mm diameter pipe	No	4		
(g)	For Single barrel of 900W x 600H portal culverts	No	4		
(h)	For Single barrel of 900W x 600H portal culverts	No	4		
(i)	For Double barrel of 1200W x 600H portal culverts	No	2		
(j)	For Single barrel of 1200W x 900H portal culverts	No	2		
(k)	For Single barrel of 1200W x 1200H portal culverts	No	2		
(l)	For Double barrel of 1500W x 900H portal culverts	No	2		
(m)	For Single barrel of 1500W x 1500H portal culverts	No	2		
(n)	For Double barrel of 1800W x 900H portal culverts	No	2		
(o)	For Tripple barrel of 4000W x 4000H portal culverts	No	2		
CARRIED FORWARD					

Item No	Description	Unit	Quantity	Rate	Amount
	BOUGHT FORWARD				
PS C1.6.14	Cleaning out of hydraulic structures:				
(a)	Pipe with diameter up to 750mm	m ³	250,00		
(b)	Box culverts up to and including 1,5m vertical dimension	m ³	650,0		
(b)	Box culverts exceeding 1,5m vertical dimension	m ³	500,0		
TOTAL CARRIED TO SUMMARY					

C1.7 LOADING AND HAULING

Item No	Description	Unit	Quantity	Rate	Amount
C1.7	LOADING				
C1.7.1.1	Loading from stockpile using machines and some hand labour where necessary	m ³	500,00		
	Loading from heaps or windrows using machines and/some hand labour where necessary	m ³	500,00		
	Loading by hand only from stockpile or heaps when labour enhancement work is specified or it is not possible to use machines	m ³	100,00		
C1.7.2.2	Hauling material for use in the Works and off-loading it on the site of the Works:				
(a)	Soil, gravel, crushed stone and pavement layer material	m ³	9 000,00		
(b)	Boulders and hard material	m ³	100,00		
C1.7.2.2	Hauling material to spoil and off-loading it at a designated spoil or stockpile area:				
(a)	Cleared and grubbed material (organic matter and all other unsuitable or waste material)	m ³ - km	2 500,00		
(b)	Soil and gravel material	m ³ - km	500,00		
(c)	Boulders, hard material and concrete	m ³ - km	3 000,00		
TOTAL CARRIED TO SUMMARY					

C2.1 GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES

Item No	Description	Unit	Quantity	Rate	Amount
C2.1	GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES				
C2.1.1	Location, identification, protection and relocation of existing services				
C2.1.1.1	Contractor's obligations	Lump Sum	1		
PS C2.1.1.2	Permanent services relocation or protection work by others				
a)	Overherad Telecommunication/ Fiber Poles and Cabling	Sum	1		
b)	Underground Telecommunication/ Fiber Poles and Cabling	Sum	1		
c)	Eskom services relocation (Incl. Pole, Transformers, etc)	Prov Sum	1	R2 200 000,00	R2 200 000,00
C2.1.1.3	Handling costs and profit in respect of item C2.1.1.2 c) above	%	R2 200 000,00	10%	R220 000,00
C2.1.1.4	Permanent services relocation or protection work by the Contractor	Prov Sum	1	R1 000 000,00	R1 000 000,00
a)	Handling costs and profit in respect of item C2.1.1.4	%	R1 000 000,00	10%	R100 000,00
C2.1.2	Existing Services location, detection and verification				
C2.1.2.1	Using specialist detection services (ground penetrating radar, radio detection etc). The works shall include provision of report and coordinated drawings in DWG format).	PC Sum	1	R750 000,00	R750 000,00
C2.1.2.2	Handling costs and profit in respect of item C2.1.2.1	%	R750 000,00	10%	R75 000,00
C2.1.2.3	Survey to verify existing services positions	PC Sum	1	R500 000,00	R500 000,00
C2.1.2.4	Handling costs and profit in respect of item C2.1.2.3	%	R500 000,00	10%	R50 000,00
C2.1.2.5	Using hand excavation to locate, expose and verify services	m ³	1000		
C2.1.3	Obtaining construction or work permits	Lump Sum	1		
C2.1.4	Provision of guarantees or deposits for service providers				
C2.1.4.1	Providing guarantees and deposits	PC Sum	1	R1 000 000,00	R1 000 000,00
C2.1.4.2	Handling costs and profit in respect of item C2.1.4.1	%	R1 000 000,00	10%	R100 000,00
C2.1.5	Provision or record drawings and applicable data	Lump Sum	1		
C2.1.19	Dealing with water services work				
C2.1.19.1	Dealing with surface water	Lump Sum	1		
C2.1.19.2	Dealing with subsurface water	Lump Sum	1		
C2.1.24	Saw-cutting before excavation				
C2.1.24.1	Saw-cutting asphalt to an average depth:				
(a)	Not Exceeding 50mm	m ²	1000		
(b)	Exceeding 50mm but not exceeding 100mm	m ²	1000		
C2.1.24.2	Saw-cutting concrete to an average depth:				
(a)	Not Exceeding 50mm	m ²	1000		

(b)	Exceeding 50mm but not exceeding 100mm	m ²	1000		
(c)	Exceeding 100mm but not exceeding 150mm	m ²	1000		
PS C2.1.28	Provision for provision of new services				
PS C2.1.28.1	Provision of Traffic Signals (Cantilever Type)				
a)	Provision of New Traffic Signals for the intersection of Vukuzimele/D2296 Road.	Sum	1		
b)	Relocation of Traffic Signals and upgrading of phasing, etc. For the intersection of Chris Hani Street/D2296 Road.	Sum	1		
PS C2.1.28.2	Additional Traffic Signals (Cantilever Type) - (Design, Supply and install)				
a)	Traffic Counts	No.	4		
b)	Traffic Counts - Intersections 1 Saturday	Sum	1		
c)	Traffic Signal Warrant Investigations	No.	4		
d)	Traffic Signal Design, supply and installation (for 4 intesections)	Sum	1		
e)	Traffic Signal Layout Plan	No.	4		
f)	Traffic Signal Operation Schedule for D2296 Road/ Chris Hani Street intesection	Sum	4		
TOTAL CARRIED TO SUMMARY					

C3.1 DRAINS

Item No	Description	Unit	Quantity	Rate	Amount
C3.1	DRAINS				
C3.1.1	Excavation for open drains:				
C3.1.1.1	Excavating all material situated within the following depth ranges below the surface level using conventional methods:				
(a)	0 m to 1,5 m	m ³	1800		
(b)	Exceeding 1,5 m and up to 3,0 m	m ³	100		
C3.1.1.2	Extra over sub-item C3.1.1.1 for excavation in hard and boulder material, irrespective of depth	m ³	100		
C3.1.1.3	Extra over sub-item C3.1.1.1 for excavation in stabilised existing road layers, irrespective of depth	m ³	100		
C3.1.5	Impermeable backfilling to subsoil drainage systems				
C3.1.5.1	Un-stabilised natural gravel obtained from approved sources on the site	m ³	500		
C3.1.5.2	G5 material obtained from commercial sources	m ³	1200		
C3.1.7	Natural permeable material in subsoil drainage systems (approved crushed stone):				
		1140			
C3.1.7.2	Crushed stone obtained from commercial sources (Fine grade stone 13.2mm nominal size aggregate)	m ³	1250		
C3.1.9	Pipes in subsoil drainage systems:				
C3.1.9.1	U-PVC pipes and fittings, normal duty, complete with couplings (160mm diameter (perforated))	m	4000		
C3.1.10	Polymer film sheeting or similar approved material, for lining subsoil drainage systems:				
C3.1.10.1	0,25 mm thick	m	2000		
C3.1.11	Geotextiles (Non-woven needle punched type: "Kaymat U24" or similar approved)				
		m ²	10000		
C3.1.13	Concrete outlet structures, manhole boxes, junction boxes and cleaning eyes for subsoil drainage systems:				
C3.1.13.1	Outlet structures (as per drawing)	No	30		
C3.1.13.3	Junction boxes (Type A as per drawings)	No	20		
C3.1.13.3	Junction boxes (Type B as per drawings)	No	20		
C3.1.13.3	Junction boxes (Type C as per drawings)	No	5		
C3.1.13.3	Junction boxes (Type D as per drawings)	No	5		
C3.1.13.4	Cleaning eyes (as per drawing)	No	10		
C3.1.14	Caps for subsoil drain pipes:				
C3.1.14.1	Concrete caps for sub-soil drain pipes	No	60		
C3.1.15	Repairing or replacing existing drainage systems	Prov Sum	1		
C3.1.22	Test flushing of subsoil drain pipe systems	kl	100		
C3.1.23	Subsoil drain outlet marker (as per drawing)	No	10		

C3.1.24	Submission of as built drawings by the Contractor	Pov Sum	1		
TOTAL CARRIED TO SUMMARY					

C3.2 CULVERTS

Item No	Description	Unit	Quantity	Rate	Amount
C3.2	CULVERTS				
C3.2.1	Excavation for culvert structures:				
C3.2.1.1	Excavating in all material situated within the following depth ranges below the surface level:				
(a)	0 m to 1,5 m	m ³	5000		
(b)	Exceeding 1,5 m and up to 3,0 m	m ³	500		
C3.2.1.4	Extra over sub-item C3.2.1.1 for excavation in hard or boulder material, irrespective of depth	m ³	500		
C3.2.1.5	Extra over sub-item C3.2.1.1 for excavation in stabilised existing road layers, irrespective of depth	m ³	500		
C3.2.2	Backfilling:				
C3.2.2.1	Using the excavated material	m ³	4000		
C3.2.2.2	Using imported selected material:	m ³	500		
C3.2.2.3	Extra over sub-items C3.2.2.1 and C3.2.2.2 for soil cement backfilling				
(a)	With wet mixture (specify cement content) of 3 % cement	m ³	1000		
C3.2.2.4	Extra over sub-items C3.2.2.1 and C3.2.2.2 for screed layers (class of concrete indicated)	m ³	100		
C3.2.3	Concrete pipe culverts:				
C3.2.3.2	On Class B bedding (type and diameter indicated)				
a)	Class 100 D pipes, 600mm diameter	m	600		
b)	Class 100D pipes, 750mm diameter	m	600		
b)	Class 100 D pipes, 900mm diameter	m	50		
c)	Class 100 D pipes, 1050mm diameter	m	60		
d)	Class 100D pipes, 1200mm diameter	m	160		
e)	2 no. off barrel of Class 100D pipes, 1200mm diameter		200		
C3.2.3.5	Provision of ske ends of pipe culverts (Class 100D 1200mm diameter)	No	10		
C3.2.5	Rectangular culverts with prefabricated elements:				
C3.2.5.1	Prefabricated portal culverts; wall and roof combination				
(a)	2 No. off barrels of Class 175S 900 x 600 Portal Culvert	m	60		
(b)	1 No. off barrels of Class 150S 1200 x 1200 Portal Culvert	m	60		
(c)	2 No. off barrels of Class 150S 1200 x 1200 Portal Culvert	m	60		
(c)	3 No. off barrels of Class 150S 1200 x 1200 Portal Culvert	m	65		
(d)	1 No. off barrels of Class 100S 1500 x 1200 Portal Culvert	m	150		

(e)	2 No. off barrels of Class 100S 1500 x 1200 Portal Culvert	m	60		
(e)	2 No. off barrels of Class 75S 3600 x 1500 Portal Culvert	m	30		
C3.2.5.1	Prefabricated floor slabs:				
(a)	For 900 x 600 (max . Leg height) portal culvert	m	120		
(b)	For 1200 x 1200 (max. leg height) portal culvert	m	360		
(b)	For 1500 x 1500 (max. leg height) portal culvert	m	180		
(b)	For 3600 x 3000 (max. leg height) portal culvert	m	60		
C3.2.7	Cast in situ concrete and formwork:				
C3.2.7.2	In complete in situ floor slabs for rectangular culverts, manholes and catchpits including formwork, joints and Class U2 surface finish (class 30/19 concrete) (installed at a standard depth of 1,0 m)	m ³	500		
C3.2.7.5	In inlet and outlet structures including kerbs, chutes and downpipes, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork but including Class U2 surfacing finish (class 30/19 concrete)	m ³	500		
C3.2.7.6	Formwork of concrete under items C3.2.7.2 and 5 above (Class F2 surface finish)	m ²	1500		
	CARRIED FORWARD				

Item No	Description	Unit	Quantity	Rate	Amount
	BOUGHT FORWARD				
C3.2.8	Concrete backfill of encasement for culverts (Class 15/19 in between the culverts)	m ³	250		
C3.2.10	Reinforcement:				
C3.2.10.3	Welded steel fabric	kg			
C3.2.16	Brickwork (Engineering bricks):				
C3.2.16.2	230 mm thick	m ²	1000		
C3.2.17	Plaster	m ²	2500		
TOTAL CARRIED TO SUMMARY					

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

Item No	Description	Unit	Quantity	Rate	Amount
C3.3	CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, AS WELL AS CONCRETE, STONE PITCHED AND GABION LININGS FOR DRAINS				
C3.3.1	Concrete kerbing:				
C3.3.1.1	Prefabricated mountable kerb, SABS 927:				
(a)	Fig 7 Kerb, as shown on drawings	m	500		
(b)	Fig 8c Kerbs, as shown on drawings	m	13000		
(c)	Fig 10 Kerb, as shown on drawings	m	13000		
(d)	Fig 12, precast barrier kerb, straight (as instructed by the Engineers)	m	2000		
C3.3.1.2	Cast in situ kerbing				
(a)	350mm X 200mm cast in situ class 25/19 concrete edge beam, as shown on drawings	m	13000		
(b)	Transitional kerbs from Semi-mountable(Fig 7) to mountable (Fig 8c)	m	1000		
(c)	Transitional kerbs from Barrier (Fig 5b) to Semi-mountable (Fig 7)	m	500		
C3.3.2	Concrete kerbing-channeling combination:				
C3.3.1.2	Cast in situ kerbing-channeling				
(a)	Type A in situ cast side drain, class 25/19 concrete (as instructed by the Engineer)	m ³	2700		
(b)	150mm thick concrete drift, class 25/19 concrete (As instructed by the Engineer)	m ³	100		
C3.3.3	Extra over items C3.3.1 for concrete kerbing or concrete kerbing and channeling on curves				
C3.3.3.1	On curves of radii more than or equal to 5,0 m but less than 20 m (Fig 7, precast semi-mountable curved kerb with nominal length of unit at 0,5m)	m	500		
C3.3.3.2	On curves with radii more than or equal to 1,0 m but less than 5,0 m	m	400		
C3.3.3.3	On curves with radii less than 1,0 m	m	50		
C3.3.4	Extra over item C3.3.2 for drop kerbs at pedestrian crossings and driveways	m	500		
C3.3.8	Linings for open drains:				
C3.3.8.1	Cast in situ concrete lining (class 15/19 concrete v-drains)	m ³	100		
C3.3.8.2	Class U2 surface finish to cast in situ concrete drains	m ²	100		
C3.3.6	Concrete chutes (typical designs) (as per drawings):				
C3.3.6.2	Cast in situ concrete chutes (Type 1: Class 25/19 concrete)	m	500		
C3.3.6.2	Cast in situ concrete chutes (Type 2: Class 25/19 concrete)	m	1600		
PS C3.3.6.4	Down chute structures (as per drawings):				
	For Type 1 Chutes:				
(a)	Inlet Structures (Low Point)	No	15		
(b)	Inlet Structures (Downstream)	No	40		
(c)	Stilling Basin	No	55		
	For Type 2 Chutes:				
(a)	Inlet Structures (Low Point)	No	5		
(b)	Inlet Structures (Downstream)	No	10		
C3.3.9	Formwork to cast in situ concrete lining for open drains (Class F2 surface finish):				
C3.3.9.1	To sides with formwork on the internal face only	m ²	4680		

C3.3.9.3	To ends of slabs	m ²	100		
C3.3.10	Sealed joints in concrete linings of open drains (description of type with reference to drawing)	m	200		
C3.3.11	Concrete screed or backfill below chutes (class 15/19 concrete)	m ³	75		
C3.3.12	Reinforcement:				
C3.3.12.3	Welded steel fabric	kg	75000		
C3.3.13	Polyethylene sheeting (0,15mm) for concrete-lined open drains	m ²	20000		
C3.3.15	Energy dissipaters in outlet structures				
C3.3.15.1	Precast concrete blocks in outlet structures	No	250		
C3.3.16	Demolition and removal of existing kerbs and/or channel (specify maximum size)	m ³	500		
PS C3.3.17	Kerb Inlet (as per design drawings):				
PS C3.3.17.1	Low-Point Kerb inlet (as per the drawings)	No	10		
PS C3.3.17.1	Sloping Kerb inlet (as per the drawings)	No	40		
TOTAL CARRIED TO SUMMARY					

C4.1 BORROW MATERIAL

Item No	Description	Unit	Quantity	Rate	Amount
C4.1	BORROW MATERIALS				
C4.2.2	Additional material investigations during the supplementary exploration				
C4.2.2.1	Cost of additional trial pits and/or drilling and laboratory testing	Prov Sum	1	R200 000,00	R200 000,00
C4.1.2.2	Handling costs and profit in respect of item C4.1.2.1	%	R200 000,00	10%	R20 000,00
C4.1.4	Removing of the overburden				
C4.1.4.1	In borrow pits	m ³	1500		
C4.1.5	Excavating of materials in the borrow pits and quarries, material obtained from				
C4.1.5.1	Soft excavation	m ³	5000		
C4.1.5.2	Boulder excavation class A	m ³	500		
C4.1.5.3	Boulder excavation class B	m ³	500		
C4.1.5.4	Hard excavation (other than by blasting)	m ³	500		
C4.1.5.5	Hard excavation (by blasting)	m ³	500		
TOTAL CARRIED TO SUMMARY					

C4.2 CUT MATERIALS

Item No	Description	Unit	Quantity	Rate	Amount
C4.2	CUT MATERIALS				
C4.2.4	Excavating of materials in box cuts, material obtained from				
C4.2.4.1	Soft excavation	m ³	30000		
C4.2.4.2	Boulder excavation class A	m ³	500		
C4.2.4.3	Boulder excavation class B	m ³	500		
C4.2.4.4	Hard excavation (other than by blasting)	m ³	500		
C4.2.4.5	Hard excavation (by blasting)	m ³	500		
C4.2.7	Removal of unsuitable stable cut material to spoil				
C4.2.7.1	In layer thicknesses of 200 mm and less	m ³	500		
C4.2.7.2	In layer thicknesses exceeding 200 mm	m ³	500		
C4.2.8	Excavate material to spoil in sites designated by the Contractor, material obtained from				
C4.2.9.1	Soft excavation	m ³	25000		
C4.2.9.2	Boulder excavation class A	m ³	500		
C4.2.9.3	Boulder excavation class B	m ³	500		
C4.2.9.4	Hard excavation (other than by blasting)	m ³	500		
C4.2.9.5	Hard excavation (by blasting)	m ³	500		
TOTAL CARRIED TO SUMMARY					

C4.3 EXISTING ROAD MATERIALS

Item No	Description	Unit	Quantity	Rate	Amount
C4.3	EXISTING ROAD MATERIALS				
C4.3.2	Cleaning the existing road surface				
C4.3.2.1	Cost to clean the road surface	m ²	82000		
C4.3.3	Removal of bituminous seal surfacing (thickness not exceeding 30 mm)	m ²	400		
C4.3.5	Providing the milling machine on the site				
C4.3.5.2	Large milling machine with a cutting width exceeding 1,2 m	No	2,00		
C4.3.7	Milling and removal of existing asphalt layers with an average milling depth (Employer takes ownership)				
C4.3.7.1	Not exceeding 50 mm	m ³	1000,00		
C4.3.8	Excavating material by milling				
C4.3.8.1	Crushed stone material	m ³			
C4.3.8.2	Cemented material	m ³	20415,00		
C4.3.15	Stockpiling of road layer materials				
C4.3.15.1	Asphalt material	m ³	400,00		
C4.3.15.3	Cemented material	m ³	20415,00		
C4.3.17	Excavate non-compliant or excess pavement layer material to spoil in sites designated by the Employer, material consisting of				
C4.3.17.1	Asphalt material	m ³	50		
C4.3.17.3	Cemented material	m ³	500,0		
TOTAL CARRIED TO SUMMARY					

C4.4 COMMERCIAL MATERIALS

Item No	Description	Unit	Quantity	Rate	Amount
C4.4	COMMERCIAL MATERIALS				
C4.4.2	Commercial materials identified by the Contractor from commercial, private or other non-commercial suppliers				
C4.4.2.1	Pavement layer material:				
(e)	Type G5 material (compacted to 96% Mod AASHTO Density)	m ³	6000		
(f)	Type G6 material (compacted to 96% Mod AASHTO Density)	m ³	8500		
C4.4.2.5	Fill material in the earthworks:				
(a)	Normal or coarse fill	m ³	1000		
TOTAL CARRIED TO SUMMARY					

C5.1 ROADBED

Item No	Description	Unit	Quantity	Rate	Amount
C5.1	ROADBED				
C5.1.1	Roadbed construction and compaction				
C5.1.1.1	Compaction of in-situ material to 90 % of MDD	m ³	22800		
C5.1.2	Excavate material to spoil				
C5.1.2.1	Excavate material to spoil from roadbed construction, material obtained from:				
(a)	Soft excavation	m ³	7200		
(b)	Boulder excavation Class A	m ³	100		
(c)	Boulder excavation Class B	m ³	100		
C5.1.4	Removal of unsuitable material to spoil				
C5.1.4.1	In layer thicknesses of 200 mm and less				
(a)	Stable material	m ³	100		
(b)	Unstable material	m ³	100		
TOTAL CARRIED TO SUMMARY					

C5.2 FILL

Item No	Description	Unit	Quantity	Rate	Amount
C5.2	FILL				
C5.2.2	Fill construction				
C5.2.2.1	Normal fill material in compacted layer thicknesses of 200 mm and less:				
(b)	Compacted to 93 % of MDD	m ³	20 000		
C5.2.5	Fill in sidewalk				
C5.2.5.1	Fill material in sidewalk compacted to 93 % of MDD	m ³	5 000		
TOTAL CARRIED TO SUMMARY					

C5.3 ROAD PAVEMENT LAYERS

Item No	Description	Unit	Quantity	Rate	Amount
C5.3	ROAD PAVEMENT LAYERS				
C5.3.2	Construction of pavement layers				
C5.3.2.1	Construction of layers using conventional construction methods:				
(a)	Lower selected subgrade layer (150mm G6) compacted to 93 % of MDD	m ³	19500		
TOTAL CARRIED TO SUMMARY					

C5.4 STABILISATION

Item No	Description	Unit	Quantity	Rate	Amount
C5.4	STABILISATION				
C5.4.2	Chemical stabilisation				
C5.4.2.1	Chemical stabilisation (150mm Thick) of pavement layers (G5 to C3)	m ³	31432		
C5.4.5	Cementitious stabilisation agents for pavement layers				
C5.4.5.1	Addition of cementitious stabilisation agents (specify agent separately) for pavement layers				
(a)	Cement (for pavement layer)	t	2000		
C5.4.10	Provision and application of water for curing	kℓ	6500		
TOTAL CARRIED TO SUMMARY					

C5.5 RECONSTRUCTION OF PAVEMENT LAYERS

Item No	Description	Unit	Quantity	Rate	Amount
C5.5	RECONSTRUCTION OF PAVEMENT LAYERS				
C5.5.15	In-situ reconstruction of a pavement layer using a recycler to construct a stabilised subbase layer				
C5.5.15.1	Chemically stabilised subbase layer compacted to 97 % of MDD:				
(a)	Using non-cemented material compacted to 150 mm thick	m ³	10210		
C5.5.16	In-situ reconstruction of a pavement layer using a recycler to construct a stabilised base layer				
C5.5.16.1	Chemically stabilised base layer compacted to 100 % of MDD:				
(a)	Using non-cemented material compacted to 150 mm thick	m ³	10210		
TOTAL CARRIED TO SUMMARY					

C6.2 SEGMENTED BLOCK PAVING LAYERS

Item No	Description	Unit	Quantity	Rate	Amount
C6.2	SEGMENTAL BLOCK PAVING LAYERS				
C6.2.1	Segmental block paving				
C6.2.1.1	a) Concrete block paving (Type S-A, Concrete Blocks laid in herringbone pattern, 80mm Thick, 25 MPa)	m ²	500		
	b) Concrete block paving (Type S-A, Concrete Blocks laid in herringbone pattern, 60mm Thick, 25 MPa)	m ²	19500		
C6.2.2	Cast in-situ concrete edge and intermediate beams				
PS C6.2.2	a) 6m sectional edge beam restraints at 50m intervals for the road	m ³	20		
	b) Longitudinal edge beam restraints	m ³	80		
	c) 1,5m sectional edge beam restraints at 100m intervals for the walkway	m ³	8		
C6.2.3	Provision and application of approved herbicide and ant poison.				
C6.2.3.1	Provision of materials	PC Sum	1	R300 000,00	R300 000,00
C6.2.3.2	Contractor's charges and profit added to the prime cost sum	%	R300 000,00	10%	R30 000,00
C6.2.4	Re sanding of joints in segmental block paving				
C6.2.4.1	Concrete block paving (indicate class, type and thickness of blocks)	m ²	20000		
PS C6.2	Construction of traffic calming devices (Speed Humps)	No	8		
PS C6.3	0,25mm Polymer film sheeting or similar approved material below paving blocks	m ²	20000		
TOTAL CARRIED TO SUMMARY					

C9.1 ASPHALT LAYERS

Item No	Description	Unit	Quantity	Rate	Amount
C9.1	ASPHALT LAYERS				
C9.1.1	Asphalt mix designs				
C9.1.1.1	Stone skeletal mixes: (a) Continuously graded surfacing (50/70 penetration, medium grade)	Lump sum	1		
C9.1.1.2	Sand skeletal mixes: (a) Continuously graded surfacing (50/70 penetration, medium grade)	Lump sum	1		
C9.1.2	Construction of trial section				
C9.1.2.1	50mm thick Continuously graded surfacing (50/70 penetration, medium grade)	m ²	500		
C9.1.2.2	Removal of trial section where so instructed by the Engineer	m ²	500		
C9.1.3	Application of bond coat				
C9.1.3.1	Stable -grade 30% net - Tack coat of 60% anionic stable grade bitumen emulsion(SS60 of COLAS or similar approved) (application rate @ 0.8 l/m ²). Applied with a calibrated distributor	l	76000		
C9.1.5	Asphalt surfacing				
	(a) Stone skeletal mix - continuously graded (50/70 penetration, medium grade)	m ²	95000		
	(b) Sand skeletal mix - continuously graded (50/70 penetration, medium grade)	m ²	1000		
C9.1.10	Variation rates				
C9.1.10.1	Bitumen (50/70 penetraion)	t	500		
C9.1.10.2	Aggregate	t	500		
C9.1.10.3	Active filler (lime)	t	500		
C9.1.10.6	Bitumous bond coat - net bitumen (50/70 penetration)	t	500		
C9.1.12	Asphalt reinforcing - complete (Type 2 pavingt grid(100 x 100 Tensile strength as per SABITA TG3).	m ²	95000		
TOTAL CARRIED TO SUMMARY					

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

Item No	Description	Unit	Quantity	Rate	Amount
C11.1	PITCHING, STONEMWORK, CAST IN SITU CONCRETE FOR PROTECTION AGAINST EROSION				
C11.1.2	Stone pitching				
C11.1.2.2	Grouted stone pitching with mortar	m ²	1000		
C11.1.4	Stone masonry walls:				
C11.1.4.2	Cement-mortared stone walls	m ³	150		
C11.1.4.3	Extra over items C11.1.4.2 for procuring stone from commercial sources	m ³	150		
C11.1.7	Provision of approved herbicide and ant poison:				
C11.1.7.1	Provision of materials	PC sum	1	R50 000,00	R50 000,00
C11.1.7.2	Contractor's charges and profit added to the prime cost sum	%	R50 000,00	10%	R5 000,00
TOTAL CARRIED TO SUMMARY					

C11.2 NON-STRUCTURAL GABIONS

Item No	Description	Unit	Quantity	Rate	Amount
C11.2	NON-STRUCTURAL GABIONS				
C11.2.1	Foundation trench excavation:				
C11.2.1.1	Excavating all material situated within the following depth ranges below the surface level				
(a)	0 m to 1,5 m	m ³	250		
(b)	Exceeding 1,5 m and up to 3,0 m	m ³	50		
(c)	Etc, in increments of 1,5 m	m ³	50		
C11.2.1.2	Extra over sub-item C11.2.1.1 for excavation in hard material, irrespective of depth	m ³	150		
C11.2.2	Surface preparation for bedding the gabion boxes and mattresses	m ²	450		
C11.2.3	Gabion boxes and mattresses:				
C11.2.3.1	(a) Galvanized gabion boxes (2m x 1m x 0.5m with 80x100x2.7 mm mesh)	m ³	300		
	(b) Galvanised gabion boxes (2 x 1m x 1m with 80x100x2,7 mm class A	m ³	50		
	(c) Galvanised gabion boxes (3m/4m x 1m x 1m with 80x100x2,7 mm class A	m ³	50		
C11.2.3.3	Galvanized gabion mattresses (0,3m deep with 80x80x2,7 mm mesh) - (3m x 1m x 0.3m)	m ³	50		
C11.2.4	Geotextile (Filter fabric (Grade U24 or similar approved)	m ²	600		
TOTAL CARRIED TO SUMMARY					

C11.4 ROAD RESTRAINT SYSTEMS

Item No	Description	Unit	Quantity	Rate	Amount
C11.5	ROAD RESTRAINT SYSTEMS				
C11.4.1	Erecting of guardrails at 3,81 m spacing				
C11.4.1.1	Complete galvanized system compliant to SANS 1350:				
(a)	On timber posts (Drawing reference)	m	600		
(d)	Extra over C11.4.1.1(a) for excavating holes for posts using labour enhanced methods (soft and intermediate)	m	600		
C11.4.4	Extra over for horizontally curved guard rails				
C11.4.4.1	Extra over C11.4.1 for horizontally curved guard rails factory bent to a radius of less than 45 m	m	100		
C11.4.4.2	Extra over C11.4.2.1(a) for horizontally curved guard rails factory bent to a radius of less than 45 m	m	50		
C11.4.6	Reflective plates				
C11.4.6.1	Steel plates	No	250		
C11.4.10	End treatments to existing guardrails with recovered or provided material:				
C11.4.10.1	End wings	No	10		
C11.4.10.2	Bullnoses	No	30		
C11.4.10.4	End treatments with single guardrails	No	5		
C11.4.10.5	End treatments with double guardrails	No	8		
C11.4.10.6	Extra over C11.4.10.4 and C11.4.10.5 for excavating holes of posts using labour enhanced methods (soft and intermediate)	No	55		
TOTAL CARRIED TO SUMMARY					

C11.6 ROAD SIGNS

Item No	Description	Unit	Quantity	Rate	Amount
C11.6	ROADS SIGNS				
C11.6.1	Road signboards with painted or coloured semi-matt background. Symbols, lettering and borders in semi- matt black or in Class I retro-reflective material, where the sign board is constructed from:				
C11.6.1.1	Aluminium sheet (2,0 mm thick):				
(b)	Area exceeding 0,5 m ² but not 2,0 m ²	m ²	300		
(c)	Area exceeding 2,0 m ² but not 10 m ²	m ²	100		
(d)	Area exceeding 10 m ²	m ²	100		
C11.6.1.6	Extra over items C11.6.1.1 to C11.6.1.4 for attaching signboards to overhead gantry structures and overhead to bridges	m ²	500		
C11.6.2	Extra over on item C11.6.1 for using:				
C11.6.2.1	Background of retro-reflective material:				
(a)	Class I	m ²	100		
(b)	Class III	m ²	400		
C11.6.2.2	Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:				
(b)	Class IV (Micro-Prismatic)	m ²	350		
C11.6.3	Road sign supports (overhead road sign structures excluded):				
C11.6.3.2	Timber				
a)	125 mm minimum dia CCA Treated	m	50		
b)	150mm minimum dia CCA Treated	m	100		
c)	175mm minimum dia CCA Treated	m	100		
C11.6.5	Excavation and backfilling for road sign supports (not applicable to kilometre posts)				
C11.6.5.1	Excavating soft material and backfilling	m ³	80		
C11.6.5.3	a)Extra over item C11.6.5.1 for cement-treated soil backfill	m ³	40		
	b) Extra over item C11.6.5.1 for rock excavation	m ³	40		
TOTAL CARRIED TO SUMMARY					

C11.7 ROAD MARKINGS & ROAD STUDS

Item No	Description	Unit	Quantity	Rate	Amount
C11.7	ROAD MARKINGS AND ROAD STUDS				
C11.7.1	Road marking:				
C11.7.1.1	a) White lines broken or unbroken (100mm wide)	km	13		
	b) White lines broken or unbroken (150mm wide)	km	7		
C11.7.1.2	Yellow lines broken or unbroken (100mm wide)	km	13		
C11.7.1.4	White lettering and symbols	m ²	500		
C11.7.2	Retro-reflective road marking:				
C11.7.2.1	White lines broken or unbroken (100mm wide)	km	13		
C11.7.2.2	Yellow lines broken or unbroken (100 mm wide)	km	7		
C11.7.2.4	White lettering and symbols	m ²	500		
C11.7.7	Road Studs				
C11.7.7.1	Permanent road studs compliant to SANS 1442				
a)	Type RSA-2 Road studs (Color: White/White back to back) - for lane lines	No.	2000,00		
b)	Type RSA-2 Road studs (Color: White/Yellow back to back) - for centerlines	No.	1000,00		
c)	Type RSA-2 Road studs (Color: Yellow/Red back to back) - For Road Edges	No.	2000,00		
d)	Type RSA-2 Road studs (Color: Red/Red back to back) - Islands	No.	200,00		
C11.7.8	Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)	km			
C11.7.9	Re-establishing the painting unit during the defects liability period and at other instances on the instruction of the Engineer	No	1		
C11.7.10	Removal of existing, temporary or final road markings by:				
C11.7.10.1	Sandlasting	m ²	200		
C11.7.10.2	Water-jetting	m ²	200		
C11.7.10.3	Overpainting as temporary measure	m ²	200		
C11.7.11	Removal of existing road studs	No	100		
PS C11.12	Traffic calming measures				
(a)	Trapezoidal Speed humps, Rumble bars etc: Complete with markings and signs as per drawings	Prov Sum	1	R250 000,00	R250 000,00
(b)	handliung cost, profit and other charges in rsepect of item PS C11.12 (a)	%	R250 000,00	10,00%	R25 000,00
TOTAL CARRIED TO SUMMARY					

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

Item No	Description	Unit	Quantity	Rate	Amount
C11.9	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
C11.9.1	Finishing road and road reserve:				
C11.9.1.2	Single carriageway road	km	6		
C11.9.2	Treatment of old roads and temporary deviations				
C11.9.2.1	Conventional construction methods	km	2		
TOTAL CARRIED TO SUMMARY					

C12.3 GROUND IMPROVEMENT

Item No	Description	Unit	Quantity	Rate	Amount
C12.3	GROUND IMPROVEMENT				
PS C12.3.20	Dumprock	m ³	1000		
TOTAL CARRIED TO SUMMARY					

C12.10 HARD EXCAVATION BY BLASTING

Item No	Description	Unit	Quantity	Rate	Amount
C12.10	HARD EXCAVATION BY BLASTING				
C12.10.1	Excavation in hard rock using controlled blasting techniques	m ³	5000		
TOTAL CARRIED TO SUMMARY					

C12.11 GEOSYNTHETICS

Item No	Description	Unit	Quantity	Rate	Amount
C12.11	GEOSYNTRHETICS				
C12.11.1	Geotextile (Grade 7) - for dumprock wrapping	m ²	42000		
TOTAL CARRIED TO SUMMARY					

C13.1 FOUNDATIONS

Item No	Description	Unit	Quantity	Rate	Amount
C13.1	FOUNDATIONS				
C13.1.2	Additional foundation investigations:				
C13.1.2.1	Provisional sum allowed for additional foundation investigations	Prov Sum	1	R300 000,00	R300 000,00
C13.1.2.2	Handling costs and profit in respect of item C13.1.2.1	%	R300 000,00	10%	R30 000,00
C13.1.3	Excavation:				
C13.1.3.1	Excavating soft material situated within the following successive depth ranges:				
(a)	0 m up to 1,5 m	m ³	1000		
(b)	> 1,5 m and < 3,0 m	m ³	100		
(c)	Etc. in increments of 1,5 m	m ³	100		
C13.1.3.2	Extra over subitem C13.1.3.1 for excavation in hard material irrespective of depth	m ³	1000		
C13.1.3.3	Extra over subitem C13.1.3.1 for additional excavation required by the Engineer after excavation is complete	m ³	50		
C13.1.3.4	Extra over subitem C13.1.3.1 for excavation by hand	m ³	100		
C13.1.10	Haul in excess of 1,0 km on excavated material and on material imported for backfill, foundation fill and fill for caissons	m³-km	500		
C13.1.14	Foundation fill consisting of:				
C13.1.14.4	Mass concrete (Class 15/19 concrete)	m ³	200		
C13.1.21	Foundation lining (0,15mm polyethylene sheeting):	m²	2500		
C13.1.26	Steel reinforcement:				
C13.1.26.2	High-yield-stress-steel bars (2,4m*6m) fabric locked into 13mm crushed stone fill	t	20		
TOTAL CARRIED TO SUMMARY					

C13.2 FALSEWORK, FORMWORK AND CONCRETE SURFACE FINISH

Item No	Description	Unit	Quantity	Rate	Amount
C13.2	FALSEWORK, FORMWORK AND CONCRETE FINISH				
C13.2.1	Formwork to provide (Class F1 finish) surface to (floor slabs and beams, etc)	m ²	200		
C13.2.2	Vertical Formwork to provide (Class F2 finish) surface to (wing walls and culvert walls, etc)	m ²	2500		
C13.2.3	Horizontal Formwork to provide (Class F2 finish) surface to (suspended slabs)	m ²	1200		
C13.2.4	Inclined Formwork to provide (Class F2 finish) surface to (for top culvert slab haunches, etc)	m ²	150		
C13.2.10	Provision of designs and drawings of falsework by an ECSA registered Professional Engineer or Technologist (Major culverts and bridges)	Lump sum	1		
TOTAL CARRIED TO SUMMARY					

C13.3 STEEL REINFORCEMENT

Item No	Description	Unit	Quantity	Rate	Amount
C13.3	STEEL REINFORCEMENT				
C13.3.1	Reinforcement for:				
C13.3.1.1	Culverts and bridges				
(a)	Mild-steel bars	t	50		
(b)	High-yield-stree-steel bars (Y10 to Y16)	t	120		
(c)	Welded Steel fabric	kg	2500		
(b)	> 1,5 m and < 3,0 m	m ³	90		
(c)	Etc. in increments of 1,5 m	m ³	100		
C13.3.4	Extra over subitem C13.3.1 for galvanising of reinforcement	t	10		
TOTAL CARRIED TO SUMMARY					

C13.4 CONCRETE

Item No	Description	Unit	Quantity	Rate	Amount
C13.4	CONCRETE				
C13.4.1	cast in situ concrete (Class of concrete and use or position in structure stated):				
C13.4.1.1	Strength concrete (class C):				
	(a) Blinding C12/15-19	m ³	500		
	(b) Mass concrete C20/25-19 for floor slabs (base slabs, aprons, etc)	m ³	1500		
	(c) Mass concrete C25/30-19 for walls and beams (ancor beams, wing walls, culvert walls, etc)	m ³	1000		
	(c) Mass concrete C25/30-19 for suspended slabs (ancor beams, wing walls, culvert walls, etc)	m ³	600		
C13.4.2	Labour enhanced cast in situ concrete (class of concrete and use or position in structure stated)				
C13.4.2.1	Commercially - Sourced concrete (Class 25-19 for v-drains and kerb channels, boundary wall footings, etc)	m ³	3500		
C13.4.2.2	Contractor-mixed concrete on site (Class 20-19 for encasements, manhole slabs, etc)	m ³	1000		
C13.4.3	Extra over item C13.4.1 for protection of concrete from adverse environmental conditions if required:				
C13.4.3.1	Strength concrete (class C):				
	(a) Blinding C12/15-19	m ³	500		
	(b) Mass concrete C20/25-19 for floor slabs (base slabs, aprons, etc)	m ³	1500		
	(c) Mass concrete C25/30-19 for walls and beams (ancor beams, wing walls, culvert walls, etc)	m ³	1000		
	(c) Mass concrete C25/30-19 for suspended slabs (ancor beams, wing walls, culvert walls, etc)	m ³	600		
C13.4.4	Extra over item C13.4.2 for protection of concrete from adverse environmental conditions if required:				
C13.4.2.1	Commercially - Sourced concrete (Class 25-19 for v-drains and kerb channels, boundary wall footings, etc)	m ³	3500		
C13.4.2.2	Contractor-mixed concrete on site (Class 20-19 for encasements, manhole slabs, etc)	m ³	1000		
C13.4.5	Curing and surface protection of cast in situ concrete, as and where specifically required:				
C13.4.5.1	Mass concrete C20/25-19 for floors (base slabs, aprons, etc) (Tenderer to specify method of curing):	m ²	1500		

C13.4.5.2	Mass concrete C25/30-19 for walls and beams (base slabs, aprons, etc) (Tenderer to specify method of curing):	m ²	2000		
C13.4.5.3	Mass concrete C25/30-19 for suspended slabs (base slabs, aprons, etc) (Tenderer to specify method of curing):	m ²	1000		
C13.4.6	Curing and surface protection of labour enhanced cast in situ concrete, as and where specifically required:				
C13.4.6.1	Commercially - Sourced concrete (Class 25-19 for v-drains and kerb channels, boundary wall footings, etc) (Tenderer to specify method)	m ²	20000		
C13.4.6.2	Contractor-mixed concrete on site (Class 20-19 for encasements, manhole slabs, etc) (Tenderer to specify method)	m ²	5000		
C13.4.9	Manufacturing precast concrete mebers (Rocla Bus Dshelter units. Width 1.22m)	No	10		
C13.4.11	Transporting and erecting of precast concrete mebers (Rocla Bus Dshelter units. Width 1.22m)	No	10		
C13.4.13	Complete demolision and disposal of existing structural concrete elements or parts of existing structures				
C13.4.13.1	Manhole foundations	m ³	500		
C13.4.13.2	Kerbing	m ³	500		
C13.4.13.3	side drains	m ³	1000		
C13.4.13.3	Foundations and walls	m ³	1000		
TOTAL CARRIED TO SUMMARY					

C14.4 SURFACE AND STRUCTURAL REPAIR OF CONCRETE

Item No	Description	Unit	Quantity	Rate	Amount
C14.4	SURFACE AND STRUCTURAL REPAIR OF CONCRETE MEMBERS				
C14.4.6	Provisional sum refurbishment of existing bridge and culvert structures (surfaces, joints, ancilliary works, etc) as instructed by the Engineer.	Prov Sum	1	R800 000,00	R800 000,00
C14.4.7	Handling costs and profit in respect of item C14.4.6	%	R800 000,00	10%	R80 000,00
TOTAL CARRIED TO SUMMARY					

C20.1 TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP

Item No	Description	Unit	Quantity	Rate	Amount
C20.1	TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP				
C20.1.2	Special tests requested by the Engineer				
C20.1.2.2	Employer's contribution to other special tests				
(a)	Specify test	Prime Cost	1	R200 000,00	R200 000,00
(i)	Handling costs and profit in respect of item C20.1.2.2(a)	%	R200 000,00	10%	R20 000,00
C20.1.3	Providing testing equipment:				
C20.1.3.1	Core drill	No	5		
C20.1.5	Financial contribution for an independent site/commercial laboratory	Month	18		
TOTAL CARRIED TO SUMMARY					

B1: DESIGN, SUPPLY, DELIVERY AND INSTALLATION OF SOLAR STREET LIGHTING

Item No	Description	Unit	Quantity	Rate	Amount
A	Site Establishment, Preliminary and Generals				
A.1	Site Camp, Establishment, Store, Rental, Transport, Clearing of site, Site Supervision, Induction, etc	/Task	1		
A.2	Induction and Medical - Foundation Crew	/Task	1		
A.3	Induction and Medical – Mast installation Crew	/Person	1		
A.4	Preparation and submission of a construction programme to the Engineer as per the requirements.	/Task	1		
A.5	Three sets construction drawings to the Engineer for approval	/Task	1		
A.6	Three sets of hard copies and an electronic copy of As-Built drawings and test certificates to the Engineer on hand-over	/Task	1		
A.7	Instructions to maintenance staff of operating and maintenance procedures, including three sets of Instruction manuals.	per Mast	1		
A.8	Inspection, Testing and Commissioning.	per Mast	100		
A.9	Compliance with the requirements of the Occupational Health and Safety Plan and regulations.	per Mast	100		
A.9	Procurement of Specialist Electrical Design and Supervision Engineer (Over 10 Years relevant Experience, Pr.Eng or Pr. Tech Eng)	Sum	1		
B	Digging				
B.1	Soil ("Normal")	m ³	160		
B.2	Soft rock ("Difficult") – intermediate material	m ³	10		
B.3	Hard rock ("Hard")	m ³	10		
C	SPLIT LED SOLAR STREET LIGHTS				
C.1	Street Light Poles (Supply, Delivery and Installation). As per the Technical Specifications in item 3.3 and Mechanically Sound to carry Solar Panel, Energy Storage & the Light Fitting. Includes, procurement, supply and installation poles, fittings, supporting works, concrete works, and any other material, plant				

	and equipment required for the full instation of pole structure)				
C.1.1	9.2M Total Length, 8M Mounting Height Galvanised Steel Surface Mount Solar Pole	each	100		
C.1.2	9.2M Total Length, 8M Mounting Height Galvanised Steel Buried Solar Pole	each	10		
C.2	Spigot Mounting (Supply, Delivery and Installation)				
C.2.1	Single Site Entry Spigot (1-Way)	each	100		
C.2.2	Double Site Entry Spigot (2-Way)	each	10		
C.3	Split LED Solar Light Core Hardware (Supply, Delivery and Installation). As per the Technical Specification in item 3.3				
C.3.1	150W / Luminaire, LED Fitting	each	100		
C.3.2	Solar Panel: 160W: Polycrystalline photovoltaic module: 25 years / 80%	each	100		
C.3.3	Battery: Lithium: 5-7 years	each	100		
C.3.4	Charge Controller: Maximum Power Point Tracking (MPPT)	each	100		
C.3.5	Energy Storage Enclosure: Standard version: Glass re-inforced fibre	each	100		
D	Prime Cost and (PC) Allowance				
D.1	PC Allowance rates for Remuneration of Community Liaison Officer	Month	1	N/A	R 8 500,00
D.2	PC Allowance rates for Remuneration of OHS Representative	Month	1	N/A	R 6 500,00
D.3	PC Allowance rates for Remuneration of OHS Agent	Month	1	N/A	R 6 500,00
	SUMMARY OF SCHEDULES				
A	Subtotal A: Preliminary & General				
B	Subtotal B: Foundations				
C	Subtotal C: High Mast Poles, Equipment & Luminaries				
D	Subtotal D: Prime Cost (PC) Allowance				
TOTAL CARRIED TO SUMMARY					

CITY OF MBOMBELA
UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6km)
SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (ZAR)
C1.2	GENERAL REQUIREMENT AND PROVISIONS	
C1.3	CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS	
C1.4	FACILITIES FOR THE ENGINEER	
C1.5	ACCOMMODATION OF TRAFFIC	
C1.6	CLEAR AND GRUBBING	
C1.7	LOADING AND HAULING	
C2.1	GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES	
C3.1	DRAINS	
C3.2	CULVERTS	
C3.3	CONCRETE KERBING, AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, CONCRETE, STONE PITCHED, AND GABION LININGS FOR OPEN DRAINS	
C4.1	BORROW MATERIALS	
C4.2	CUT MATERIALS	
C4.3	EXISTING ROAD MATERIALS	
C4.4	COMMERCIAL MATERIALS	
C5.1	ROADBED	
C5.2	FILL	
C5.3	ROAD PAVEMENTS LAYERS	
C5.4	STABILISATION	
C5.5	RECONSTRUCTION OF PAVEMENT LAYERS	
C6.2	SEGMENTAL BLOCK PAVING LAYERS	
C9.1	ASPHALT LAYERS	
C11.1	PITCHING, STONWORK, CAST IN SITU CONCRETE FOR PROTECTION AGAINST EROSION	
C11.2	NON-STRUCTURAL GABIONS	
C11.4	ROAD RESTRAINT SYSTEMS	
C11.6	ROAD SIGNS	
C11.7	ROAD MARKINGS & ROAD STUDS	
C11.9	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
C12.3	GROUND IMPROVEMENT	
C12.10	HARD EXCAVATION BY BLASTING	
C12.11	GEOSYTHETICS	
C13.1	FOUNDATIONS	
C13.2	FALSE WORK, FORMWORK AND CONCRETE SURFACE FINISH	
C13.3	STEEL REINFORCEMENT	
C13.4	CONCRETE	
C14.4	SURFACE AND STRUCTURAL REPAIR OF CONCRETE	
C20.1	TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP	
B1	DESIGN, SUPPLY, DELIVERY AND INSTALLATION OF SOLAR STREET LIGHTING	
SUB-TOTAL NO.1		
ADD 10% CONTINGENCIES		
ADD 10% CONTRACT PRICE ADJUSTMENT		
CIDB COMPLIANCE - Contract skills development goal (CSDG) 0.25% Inclusive of Handling fees 0.25% OF SUB-TOTAL NO.1		
SUB-TOTAL NO.2		
ADD 15% VAT		
TOTAL CONSTRUCTION COST		

PART C3 **SCOPE OF WORKS**

PART C3: SCOPE of WORK

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C3.1: DESCRIPTION OF WORKS**C3.1 DESCRIPTION OF THE WORKS****C3.1.1 EMPLOYER'S OBJECTIVES**

The employer's objectives are to deliver public infrastructure using labour-intensive methods with the aim of services delivery, job creation and poverty alleviation.

The Employer requires the **UPGRADING OF D2296 FROM TEKWANE SOUTH TO KANYAMAZANE (6km)**, from two lane asphalt surfaced to a maximum of four lane asphalt surfaced road.

The D2296 Road starts from Tekwane South and terminate at the intersection of D2296 / N4 road, towards Kanyamazane, within the bounds of the City of Mbombela Local Municipality

The Employer desires that the work required be of a high standard and be completed in the shortest practical time whilst creating jobs for local labourers and contractors.

It is highly recommended that thirty percent (30%) of the project be executed by local sub-contractor/s as far as possible.

EPWP REQUIREMENT**1. Expanded Public Works Programme (EPWP)**

The service provider must provide the Municipality with a completed list of local labourers for EPWP registration, monthly reports on this to be submitted to the project manager. The aforesaid list must be updated and submitted monthly, inclusive of the following details:

- i. Salary / wages spent on local employees versus total wages / salary budget at site
- ii. Number of local employees employed versus per total workforce at site
- iii. Payments made to the local labourers

2. Demographics

Members of the community who are unemployed and who form part of the targeted groups not less than 60% women, not less than 55% (youth from 18 - 35 years of age) and not less than 2% people with disabilities should be given an opportunity to apply for work.

CONSTRAINTS**1. Restricted Site Access**

Access to portions of the site may be restricted due to existing infrastructure, adjacent properties, environmental sensitivities, utility services, or operational requirements. The Contractor shall allow for phased construction and restricted access conditions in the tendered rates.

2. Existing Services

Numerous underground and overhead services may be present within the construction area. The exact location of all services is not guaranteed and the Contractor shall verify service positions before commencing excavation.

3. Working Around Existing Traffic

The works will be undertaken adjacent to live traffic. The Contractor shall maintain safe traffic movement and shall make provision for temporary traffic accommodation, signage, flag personnel and pedestrian management.

4. Operational Facilities

The facility shall remain operational throughout the contract period. The Contractor shall minimise disruption and maintain safe access at all times.

5. Community Sensitivities

The project is located within a populated community area. Provision shall be made for stakeholder engagement and local labour management.

Security Risks

The Employer does not guarantee the security of materials, plant or personnel on site. The Contractor shall provide site security.

6. Limited Working Space

Storage areas, stockpiles, plant movement and contractor facilities may be limited.

Weather Constraints

Tenderers are advised that the project area experiences seasonal rainfall which may affect construction operations. The Contractor shall make reasonable allowance for normal weather conditions expected during the construction period.

7. Geotechnical Constraints

Preliminary geotechnical investigations indicate variable subsurface conditions. Tenderers shall note that excavation conditions may differ from those anticipated and shall inspect available geotechnical information prior to tendering.

8. Environmental Constraints

Construction activities shall comply with all environmental authorisations and EMP requirements.

9. Seasonal Watercourses

Water levels may fluctuate significantly following rainfall events. Provision shall be made for temporary works and protection of partially completed works.

10. Utility Relocations

Certain existing services may require relocation by utility owners. Delays associated with third-party service providers may occur and shall be considered during programme development.

11. Existing Structures

Existing structures may be fragile, deteriorated or undocumented. Care shall be exercised when working adjacent to them.

12. Access Through Private Property

Access to portions of the site may require coordination with adjacent property owners. The Contractor shall restrict operations to approved servitudes and construction areas.

13. School Environment

Particular attention shall be given to learner safety, temporary walkways, barricading and signage.

14. High Groundwater

Groundwater seepage may be encountered during excavation works. Tenderers shall satisfy themselves regarding groundwater conditions and make provision in their rates where necessary.

15. Community Business Forums

The Employer does not guarantee uninterrupted access to the site arising from unlawful community disruptions, business forum activities, intimidation, extortion or similar events. Tenderers shall familiarise themselves with local conditions and make reasonable provision for stakeholder engagement.

16. Material Haulage Constraints

Haul routes pass through residential areas and may be subject to municipal restrictions, speed limitations and road condition constraints.

17. Working Hours Restrictions

Construction activities may be restricted to approved working hours.

18. Tenderer's Duty to Inspect

Tenderers shall be deemed to have inspected the site, examined all available information, assessed local conditions and satisfied themselves regarding all matters that may influence the execution of the Works, the Contract Price and the Contract Period.

C3.1.2 OVERVIEW OF THE WORKS

The contract entails the UPGRADING OF D2296 FROM TEKWANE SOUTH TO KANYAMAZANE (6km). The road is currently in the worst state which necessitated the rehabilitation/upgrading of the existing two lane asphalt surfaced road to a three (3) to four (4) asphalt surfaced.

The affected scope of the D2296 Road is approximately 6 km (6 000m) long. The road requires upgrading of the existing road cross-section from a two lane roadway to three (3) to four (4) lane, asphalt surfaced road way, with shoulders, side drains, sidewalks and improved road markings and signs. The road follows a fixed corridor aligned through both formal and informal settlements.

The road is currently an major arterial road which services as a public transport route, between Tekwane township, Kanyamazane, Mbombela CBD and other critical surround areas. Once this

road is upgraded, there will be a significant increase in the traffic capacity of the road.

The road surfaced cambered width shall range between 13.5 – 17 meters, inclusive of shoulders. The paving shall be asphalt. The edge protection shall consist of the following options:

- Surfaced shoulders
- Gravel shoulders
- Concrete side drains

C3.1.3 EXTENT OF WORKS

The approximate length of the road to be upgraded is 6 km. The road is a single carriageway within a built-up area where there are a number of encroachments by household yards. The lane width will be 3.5m from beginning of the road to the end.

The pavement design includes the Roadbed 150m in-situ G9, 150mm selected layer G7, 150mm C3 Lower Subbase, 150mm C3 Upper Subbase, 100kN/m Paving Grid (Type 2) and 50mm thick Asphalt as a surface layer.

The Works to be carried out by the Contractor under this Contract comprise mainly the following (but not limited to):

- Contractor's establishment on site
- Compliance with EMP requirements
- Compliance with OHS act requirements
- Provisions of temporary workforce
- Training of temporary workforce
- Housing, offices and laboratories for the engineer's site personnel
- Traffic accommodation
- Overhaul
- Clearing and grubbing
- Drains
- Prefabricated culverts
- Concrete kerbing, concrete channeling, chutes and downpipes, and concrete lining for open drains
- Borrow materials
- Mass earthworks
- Pavement layers of gravel material
- Stabilization
- Pitching, stonework and protection against erosion
- Gabions
- Guardrails
- Fencing
- Road signs
- Road markings
- Finishing the road and road reserve and treating old roads

- Concrete block paving for roads
- Testing material and workmanship
- Locating, moving and protection of existing services
- Site clearance and moving of fences
- 150 mm in-situ roadbed preparation G9 compacted @ 90% Mod AASHTO density
- Construction of a 150 mm thick G7 selected layer @ 93% Mod AASHTO density
- Construction of a 150mm thick C3 lower subbase layer @ 95 Mod AASHTO Density
- Construction of a 150 mm thick C3 upper subbase layer @ 98% Mod AASHTO density.
- Installation of 100kN/m Paving Grid (Type 2).
- Construction of 50mm thick Asphalt Surfacing.
- Placement of figure 8C kerbing according to the drawings.
- Installation of 20mm sand bedding for sidewalks.
- Construction of 60mm Type S-A paver blocks for sidewalks.
- Construction of concrete edge beams according to the drawings
- Construction of Minor and Major stormwater management systems (incl. Bridges, culverts, pipes, kerb inlets, junction boxes, down chutes, etc);
- Correction of defects in the Works in accordance with the requirements specified in the Contract Documents.

This description of the Works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract.

Approximate quantities of each type of work are given in the Schedule of Quantities

C3.1.4 LOCATION OF THE WORKS

The Road upgrades for the D2296 start from Tekwane South and terminate at the intersection of D2296 / N4 road, towards Kanyamazane, within the bounds of the City of Mbombela Local Municipality in the Mpumalanga Province.

The start and end coordinates for the proposed site are shown in the table below:

Table 1: LOCATION OF THE WORKS

Project Name	Start	End	District Municipality	Local Municipality
UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6KM)	Lat: 25°28'31.65"S Long: 31° 9'2.19"E	Lat: 25°29'57.67"S Long: 31°10'48.53"E	Ehlanzeni	City of Mbombela

C3.1.5 TEMPORARY WORKS

The Contractor shall, as relevant,

- provide temporary drainage works, temporary pumps and other equipment as might be necessary for the protection, draining and dewatering of the works; and
- Construct and maintain haulage, temporary access and construction roads,

subject to the approval of the Employer, and permit the Employer, other Contractors, statutory bodies or any other person who might require legitimate access to or through the site for the purpose of executing legitimate business, free and unhindered usage of such roads.

- c) Temporary water connections, Contractor's offices, storage sheds, latrines, barricading of Works shall be located in an approved position and subject to the approval of all authorities concerned.
- d) Safety and Security of the Contractors' temporary works shall be at the Contractors' discretion.
- e) The camp shall be adequately guarded during or outside working hours

PS.2 DESCRIPTION OF THE SITE AND ACCESS

PS.2.2 Access to Site

Access to site is per normal vehicle.

PS.2.3 Nature of the Ground and Subsoil Conditions

A multi-disciplinary geotechnical centreline and materials investigation was conducted for the **UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE (6KM)**. The investigation was undertaken in order to assess the engineering geological character of the area, focusing on the geotechnical properties which will affect the construction of the proposed new road.

The findings of this investigation are elucidated in their report, the summary of which is available from the Employer's Agent at request. All of the relevant material testing data is included in the report.

PS.2.4 Construction in Confined Areas

It will be necessary for the Contractor to work in confined areas. No additional payment will be made for work in "restricted areas", except in the case of structures as described in Clause A13.1.7.5 d) of the Standard Specifications. In certain areas the width of the fill material and pavement layers may reduce to zero and the working space may be confined. The method of construction in these confined areas depends on the Contractor's Constructional Plant. However, the Contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions, irrespective of the methods used to achieve these cross-sections and dimensions, and that the rates and amounts tendered will be deemed to include full compensation for any special equipment or construction methods or for any difficulty encountered in working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for payment be considered on account of these difficulties

PS.3.2 Labour-Optimising Construction Activities

(a) General

The portions of the Works listed in Subclause (b) below shall, unless otherwise instructed by the Engineer, be constructed under this Contract using labour-optimising construction methods only. Payment for works identified in Subclause (b) below shall be made in accordance with the pay items provided in the bill of quantities.

In respect of those portions of the Works which are not listed in Subclause (b), the construction methods adopted and Plant used shall be at the discretion of the Contractor, provided always that the construction methods adopted and Plant used by the Contractor are appropriate in respect of the nature of the Works to be executed and the standards to be achieved in terms of the Contract.

(b) Operations to be executed using labour-optimising construction methods

The following portions of the Works shall be executed using labour-optimising construction methods:

- i. Clearing and grubbing at inlets and outlets of hydraulic structures
- ii. Cleaning of hydraulic structures
- iii. Excavating for all open drains, culverts, inlet and outlet structures, fence posts, road sign posts and guardrail posts
- iv. Constructing culvert inlet and outlet structures as well as cast in situ slabs, including all masonry work and minor precast work. All concrete shall be mixed by hand or by hand-driven mixing machines
- v. Removing oversize material
- vi. Block paving

PS.3.3 Restrictions on the Use of Personnel in the Permanent Employee of the Contractor

(a) The Contractor shall limit the use on the Contract Works of his permanently employed personnel to that of key personnel only (as defined in Part C of the Project Specifications) and shall, subject to the further provisions of the following parts of the Project Specifications

- (i) Part C - Provision of the temporary workforce

execute and complete the Works using a temporary workforce employed directly by the Contractor and/or by Subcontractors.

(b) The Engineer may at his discretion, upon receipt of a written and fully motivated application from the Contractor and where he deems the circumstances to warrant, authorise in writing that the Contractor may use in the execution of the Works, workers not being his key personnel but who are in his permanent employ. Without limiting the generality of application of this subclause, circumstances which may be considered by the Engineer to warrant the authorization of the use of the Contractor's permanent employees not being key personnel, include:

- (i) The unavailability of sufficient numbers of temporary workers and/or Subcontractors to execute the Works, provided always that the Contractor has proven that he has exercised his best endeavours and taken all reasonable actions to recruit sufficient numbers of temporary workers and Subcontractors and has exhausted all reasonable recruitment options
- (ii) The unavailability within the temporary worker pool and/or subcontractor sources available to the Contractor in terms of the Contract, of sufficient of the required knowledge and skills necessary for the execution of the Works or specific portions thereof, in cases where the time for completion allowed in the Contract is insufficient to facilitate the creation of the necessary skills through the provision of training as contemplated in this Contract
- (iii) Any other circumstances which the Engineer may deem as constituting a warrant.

PS.3.4 Community Liaison and Community Relations

In all dealings with the various communities and workers employed from within the communities, the Contractor shall take due cognisance of the character, culture and circumstances of the communities involved and shall at all times use his best endeavours to avoid the development of disputes and to foster a spirit of co-operation and harmony towards the Contract. The Contractor shall at all times keep the Engineer fully informed on all matters affecting the Contract and the communities and shall attend all meetings of the Project Co-ordinating Committee as may be reasonably required by the Engineer. All matters concerning the communities shall be discussed and where possible, resolved at such meetings.

Where any resolution of the Project Co-ordinating Committee shall be contrary to the terms and provisions of the Contract, the Contractor shall not give effect to them without a prior

written instruction from the Engineer. Where the Contractor is of the opinion that any instruction of the Engineer issued in terms of this clause will result in him incurring additional costs which were not provided for in his tendered rates and prices, and/or that a delay in the progress of the Works will result, he will be entitled to submit a claim in terms of Clause 5.12 and 10.1 of the General Conditions of Contract, provided always that the period of twenty-eight (28) days referred to in Clause 10.1.1.1 shall be reduced to three (3) normal working days in respect of all claims submitted in terms of this clause.

The Community Liaison Officer shall be remunerated as per Clause C1.2.4 of COTO 2020.

PS.3.13 Construction Programme

(a) Preliminary Programme

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

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

(b) Programme in terms of Clause 5.6 of the General Conditions of Contract

It is essential that the construction programme, which shall conform in all respects to Clause 5.6 of the General Conditions of Contract, be furnished within the time stated in the Contract Data. The preliminary programme to be submitted with the tender shall be used as the basis for this programme

C3.2: ENGINEERING

C3.2 ENGINEERING

C3.2.1 DESIGN

- (a) The Employer is responsible for the design of the permanent Works as reflected in the Contract Documents unless otherwise stated.
- (b) The Contractor is responsible for the design of the temporary Works (if applicable) and their compatibility with the permanent Works.
- (c) The Contractor shall supply all details necessary to assist the Engineer in the compilation of the record drawings.

C3.2.2 EMPLOYER'S DESIGN

The Employer's Design is contained in the Tender Documentation and Drawings. Amendments to the design, if necessary, will be issued during the construction phase.

C3.2.3 CONTRACTOR'S DESIGN

Where the Contractor is to supply the design of designated parts of the permanent Works or temporary Works, he shall supply full working drawings supported by a professional engineer's design certificate.

C3.2.4 DRAWINGS

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and dimensions shall not be scaled from the Drawings, unless required by the Employer's Agent. The Employer's Agent will, on the request of the Contractor in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

The Contractor shall ensure that accurate as-built records are kept of all infrastructure installed or relocated during the contract. The position of pipe bends, junction boxes, duct ends, and all other underground infrastructure shall be given by either co-ordinates or stake value and offset. Where necessary, levels shall also be given. A marked-up set of drawings shall also be kept and updated by the Contractor. This information shall be supplied to the Employer's Agent's Representative on a regular basis.

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

The Drawings prepared by the Employer for the permanent Works are listed below and are bound in a separate document or is attached at the back of this volume. The Employer reserves the right to issue and/or amended additional drawings during the Contract.

Drawing No:	Drawing Description	PURPOSE
0. GENERAL ROADS DRAWING		
LAYOUTS		
RC-2296-RDS-KEY-001	ROADS & STRUCTURES KEY PLAN	TENDER
RC-2296-RDS-LM-001	LOCALITY MAP	TENDER
RC-2296-RDS-LY-001	ROADS & STRUCTURES LAYOUT 1 OF 22	TENDER

RC-2296-RDS-LY-002	ROADS & STRUCTURES LAYOUT 2 OF 22	TENDER
RC-2296-RDS-LY-003	ROADS & STRUCTURES LAYOUT 3 OF 22	TENDER
RC-2296-RDS-LY-004	ROADS & STRUCTURES LAYOUT 4 OF 22	TENDER
RC-2296-RDS-LY-005	ROADS & STRUCTURES LAYOUT 5 OF 22	TENDER
RC-2296-RDS-LY-006	ROADS & STRUCTURES LAYOUT 6 OF 22	TENDER
RC-2296-RDS-LY-007	ROADS & STRUCTURES LAYOUT 7 OF 22	TENDER
RC-2296-RDS-LY-008	ROADS & STRUCTURES LAYOUT 8 OF 22	TENDER
RC-2296-RDS-LY-009	ROADS & STRUCTURES LAYOUT 9 OF 22	TENDER
RC-2296-RDS-LY-010	ROADS & STRUCTURES LAYOUT 10 OF 22	TENDER
RC-2296-RDS-LY-011	ROADS & STRUCTURES LAYOUT 11 OF 22	TENDER
RC-2296-RDS-LY-012	ROADS & STRUCTURES LAYOUT 12 OF 22	TENDER
RC-2296-RDS-LY-013	ROADS & STRUCTURES LAYOUT 13 OF 22	TENDER
RC-2296-RDS-LY-014	ROADS & STRUCTURES LAYOUT 14 OF 22	TENDER
RC-2296-RDS-LY-015	ROADS & STRUCTURES LAYOUT 15 OF 22	TENDER
RC-2296-RDS-LY-016	ROADS & STRUCTURES LAYOUT 16 OF 22	TENDER
RC-2296-RDS-LY-017	ROADS & STRUCTURES LAYOUT 17 OF 22	TENDER
RC-2296-RDS-LY-018	ROADS & STRUCTURES LAYOUT 18 OF 22	TENDER
RC-2296-RDS-LY-019	ROADS & STRUCTURES LAYOUT 19 OF 22	TENDER
RC-2296-RDS-LY-020	ROADS & STRUCTURES LAYOUT 20 OF 22	TENDER
RC-2296-RDS-LY-021	ROADS & STRUCTURES LAYOUT 21 OF 22	TENDER
RC-2296-RDS-LY-022	ROADS & STRUCTURES LAYOUT 22 OF 22	TENDER
LONGSECTIONS		
RC-2296-RD-LS-001	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 0.000 TO 0.448	TENDER
RC-2296-RD-LS-002	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 0.448 TO 0.896	TENDER
RC-2296-RD-LS-003	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 0.896 TO 1.344	TENDER
RC-2296-RD-LS-004	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 1.344 TO 1.793	TENDER
RC-2296-RD-LS-005	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 1.793 TO 2.241	TENDER
RC-2296-RD-LS-006	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 2.241 TO 2.689	TENDER
RC-2296-RD-LS-007	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 2.689 TO 3.138	TENDER
RC-2296-RD-LS-008	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 3.138 TO 3.586	TENDER
RC-2296-RD-LS-009	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 3.586 TO 4.034	TENDER
RC-2296-RD-LS-010	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 4.034 TO 4.483	TENDER
RC-2296-RD-LS-011	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 4.483 TO 4.931	TENDER
RC-2296-RD-LS-012	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 4.931 TO 5.379	TENDER
RC-2296-RD-LS-013	UPGRADING OF D2296 ROAD FROM TEKWANE SOUTH TO KANYAMAZANE: km 5.379 TO 5.607	TENDER

CROSS-SECTIONS		
RC-2296- RD-XS-001	CROSS SECTION CH00 TO CH180	TENDER
RC-2296-RD-XS-002	CROSS SECTION CH190 TO CH600	TENDER
RC-2296-RD-XS-003	CROSS SECTION CH680 TO CH1080	TENDER
RC-2296-RD-XS-004	CROSS SECTION CH1120 TO CH1660	TENDER
RC-2296-RD-XS-005	CROSS SECTION CH1670 TO CH1860	TENDER
RC-2296-RD-XS-006	CROSS SECTION CH1870 TO CH2020	TENDER
RC-2296-RD-XS-007	CROSS SECTION CH2030 TO CH2590	TENDER
RC-2296-RD-XS-008	CROSS SECTION CH2600 TO CH2890	TENDER
RC-2296-RD-XS-009	CROSS SECTION CH2900 TO CH3190	TENDER
RC-2296-RD-XS-010	CROSS SECTION CH3200 TO CH3580	TENDER
RC-2296-RD-XS-011	CROSS SECTION CH3590 TO CH4050	TENDER
RC-2296-RD-XS-012	CROSS SECTION CH4060 TO CH4250	TENDER
RC-2296-RD-XS-013	CROSS SECTION CH4280 TO CH4600	TENDER
RC-2296-RD-XS-014	CROSS SECTION CH4610 TO CH4840	TENDER
RC-2296-RD-XS-015	CROSS SECTION CH4870 TO CH5060	TENDER
RC-2296-RD-XS-016	CROSS SECTION CH5070 TO CH5440	TENDER
1. INTERSECTION		
RC-2269-RD-INT-001	INTERSECTION LAYOUT SHT 1 OF 4	TENDER
RC-2269-RD-INT-002	INTERSECTION LAYOUT SHT 2 OF 4	TENDER
RC-2269-RD-INT-003	INTERSECTION LAYOUT SHT 3 OF 4	TENDER
RC-2269-RD-INT-004	INTERSECTION LAYOUT SHT 4 OF 4	TENDER
2. MAJOR STORMWATER		
2.1 CULVERTS		
RC-2296-MSW-CV-001	BRIDGE km 0.114: CULVERT SECTION, TYPICAL CULVERT SECTION, DETAIL INLET STRUCTURE, CULVERT LAYOUT	TENDER
RC-2296-MSW-CV-002	BRIDGE km 3.02: CULVERT SECTION, TYPICAL CULVERT SECTION, DETAIL INLET STRUCTURE, CULVERT LAYOUT	TENDER
RC-2296-MSW-CV-003	BRIDGE km 4.48: CULVERT SECTION, TYPICAL CULVERT SECTION, DETAIL INLET STRUCTURE, CULVERT LAYOUT	TENDER
RC-2296-MSW-CV-004	BRIDGE km 4.7: CULVERT SECTION, TYPICAL CULVERT SECTION, DETAIL INLET STRUCTURE, CULVERT LAYOUT	TENDER
2.2 BENDING SCHEDULES		
RC-2296-MSW-BS-001	BRIDGE km 0.114: CULVERT SECTION, TYPICAL CULVERT SECTION AND REINFORCEMENT DETAILS	TENDER
RC-2296-MSW-BS-002	BRIDGE km 3.020: CULVERT SECTION, TYPICAL CULVERT SECTION AND REINFORCEMENT DETAILS	TENDER
RC-2296-MSW-BS-003	BRIDGE km 4.483: CULVERT SECTION, TYPICAL CULVERT SECTION AND REINFORCEMENT DETAILS	TENDER

RC-2296-MSW-BS-004	BRIDGE km 4.70: CULVERT SECTION, TYPICAL CULVERT SECTION AND REINFORCEMENT DETAILS	TENDER
3. STORMWATER		
3.1 STORMWATER LAYOUTS		
RC-2296-SW-KEY-001	STORMWATER KEY PLAN	TENDER
RC-2296-SW-LY-001	STORMWATER LAYOUT 1 OF 22	TENDER
RC-2296-SW-LY-002	STORMWATER LAYOUT 2 OF 22	TENDER
RC-2296-SW-LY-003	STORMWATER LAYOUT 3 OF 22	TENDER
RC-2296-SW-LY-004	STORMWATER LAYOUT 4 OF 22	TENDER
RC-2296-SW-LY-005	STORMWATER LAYOUT 5 OF 22	TENDER
RC-2296-SW-LY-006	STORMWATER LAYOUT 6 OF 22	TENDER
RC-2296-SW-LY-007	STORMWATER LAYOUT 7 OF 22	TENDER
RC-2296-SW-LY-008	STORMWATER LAYOUT 8 OF 22	TENDER
RC-2296-SW-LY-009	STORMWATER LAYOUT 9 OF 22	TENDER
RC-2296-SW-LY-010	STORMWATER LAYOUT 10 OF 22	TENDER
RC-2296-SW-LY-011	STORMWATER LAYOUT 11 OF 22	TENDER
RC-2296-SW-LY-012	STORMWATER LAYOUT 12 OF 22	TENDER
RC-2296-SW-LY-013	STORMWATER LAYOUT 13 OF 22	TENDER
RC-2296-SW-LY-014	STORMWATER LAYOUT 14 OF 22	TENDER
RC-2296-SW-LY-015	STORMWATER LAYOUT 15 OF 22	TENDER
RC-2296-SW-LY-016	STORMWATER LAYOUT 16 OF 22	TENDER
RC-2296-SW-LY-017	STORMWATER LAYOUT 17 OF 22	TENDER
RC-2296-SW-LY-018	STORMWATER LAYOUT 18 OF 22	TENDER
RC-2296-SW-LY-019	STORMWATER LAYOUT 19 OF 22	TENDER
RC-2296-SW-LY-020	STORMWATER LAYOUT 20 OF 22	TENDER
RC-2296-SW-LY-021	STORMWATER LAYOUT 21 OF 22	TENDER
RC-2296-SW-LY-022	STORMWATER LAYOUT 22 OF 22	TENDER
3.2 STORMWATER DETAILS		
RC-2296-SW-SD-001	KERB INLET DETAILS	TENDER
RC-2296-SW-SD-002	GRID INLET DETAILS	TENDER
RC-2296-SW-SD-003	FIELD AND BERMS INLET DETAILS	TENDER
RC-2296-SW-SD-004	JUNCTION BOXES DETAILS	TENDER
RC-2296-SW-SD-005	HEAD WALL STRUCTURES AND EROSION PROTECTION DETAILS	TENDER
RC-2296-SW-SD-006	CHUTE OUTLET STRUCTURES	TENDER
RC-2296-SW-SD-007	TRENCH AND V-DRAINS DETAILS	TENDER
SUBSOILS		
RC-2296-SUB-KEY-001	SUBSOIL KEY PLAN LAYOUT	TENDER
RC-2296-SUB-LY-001	SUBSOIL LAYOUT 1 OF 5	TENDER
RC-2296-SUB-LY-002	SUBSOIL LAYOUT 2 OF 5	TENDER
RC-2296-SUB-LY-003	SUBSOIL LAYOUT 3 OF 5	TENDER
RC-2296-SUB-LY-004	SUBSOIL LAYOUT 4 OF 5	TENDER
RC-2296-SUB-LY-005	SUBSOIL LAYOUT 5 OF 5	TENDER
RC-2296-SUB-DT-001	SUB-SOIL DETAILS	TENDER
4. ROAD MARKINGS AND SIGNS		

RC-2296-RD-DT-001	PAVEMENT STRUCTURE AND ROAD MARKING DETAIL	TENDER
RC-2296-RDM-LY-001	ROAD MARKING & SIGNS LAYOUT SHT 1 OF 22	TENDER
RC-2296-RDM-LY-002	ROAD MARKING & SIGNS LAYOUT SHT 2 OF 22	TENDER
RC-2296-RDM-LY-003	ROAD MARKING & SIGNS LAYOUT SHT 3 OF 22	TENDER
RC-2296-RDM-LY-004	ROAD MARKING & SIGNS LAYOUT SHT 4 OF 22	TENDER
RC-2296-RDM-LY-005	ROAD MARKING & SIGNS LAYOUT SHT 5 OF 22	TENDER
RC-2296-RDM-LY-006	ROAD MARKING & SIGNS LAYOUT SHT 6 OF 22	TENDER
RC-2296-RDM-LY-007	ROAD MARKING & SIGNS LAYOUT SHT 7 OF 22	TENDER
RC-2296-RDM-LY-008	ROAD MARKING & SIGNS LAYOUT SHT 8 OF 22	TENDER
RC-2296-RDM-LY-009	ROAD MARKING & SIGNS LAYOUT SHT 9 OF 22	TENDER
RC-2296-RDM-LY-010	ROAD MARKING & SIGNS LAYOUT SHT 10 OF 22	TENDER
RC-2296-RDM-LY-011	ROAD MARKING & SIGNS LAYOUT SHT 11 OF 22	TENDER
RC-2296-RDM-LY-012	ROAD MARKING & SIGNS LAYOUT SHT 12 OF 22	TENDER
RC-2296-RDM-LY-013	ROAD MARKING & SIGNS LAYOUT SHT 13 OF 22	TENDER
RC-2296-RDM-LY-014	ROAD MARKING & SIGNS LAYOUT SHT 14 OF 22	TENDER
RC-2296-RDM-LY-015	ROAD MARKING & SIGNS LAYOUT SHT 15 OF 22	TENDER
RC-2296-RDM-LY-016	ROAD MARKING & SIGNS LAYOUT SHT 16 OF 22	TENDER
RC-2296-RDM-LY-017	ROAD MARKING & SIGNS LAYOUT SHT 17 OF 22	TENDER
RC-2296-RDM-LY-018	ROAD MARKING & SIGNS LAYOUT SHT 18 OF 22	TENDER
RC-2296-RDM-LY-019	ROAD MARKING & SIGNS LAYOUT SHT 19 OF 22	TENDER
RC-2296-RDM-LY-020	ROAD MARKING & SIGNS LAYOUT SHT 20 OF 22	TENDER
RC-2296-RDM-LY-021	ROAD MARKING & SIGNS LAYOUT SHT 21 OF 22	TENDER
RC-2296-RDM-LY-022	ROAD MARKING & SIGNS LAYOUT SHT 22 OF 22	TENDER
6. NAME BOARD		
RC-2296-NB-006	NAME BOARD	TENDER

C3.2.5 DESIGN PROCEDURES

Not applicable.

C3.3: PROCUREMENT

C3.3 PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT

C3.3.1.1 Requirements

Tenders will be evaluated in terms of the City of Mbombela Preferential Procurement Policy. Points will be awarded for price and specific contract participation goals as contained in the Tender Data.

C3.3.1.2 Resource standard pertaining to targeted procurement

The Preferential Procurement Policy (PPP) of the City of Mbombela is applicable to this project. Refer to the Tender Data.

C3.3.2 SUBCONTRACTING

C3.3.2.1 Preferred subcontractors/suppliers

Where possible, local subcontractors should be considered for subcontract work provided they are capable.

C3.3.2.2 Scope of mandatory subcontract works for LI items (Labour Rates)

- | | |
|-----------------------------|---|
| a) Paving | - R55/m ² - R60/m ² |
| b) Kerbing | - R45/m - R50/m |
| c) V – Drains | - R80/m ³ - R90/m ³ |
| d) Gabions | – R150/m ³ - R180/m ³ |
| e) Backfilling Waterlines | – R35/m ³ to R40/m ³ |
| f) Erect diamond fences | – R60/m |
| g) Brickwall | – R60/m - R80/m |
| h) Plastering | – R70/m ² - R80/ m ² |
| i) Guard Rails | – R420/m |
| j) Speed humps | – R2,650/ Speed hump |
| k) Hiring of Mobile toilets | – R2500/month – R3000/m |

However, local subcontractors should be considered provided they are capable.

C3.3.2.3 Attendance on subcontractors

Not applicable.

C3.3.2.4 Subcontracting procedures

The contractor is solely responsible for negotiating with local subcontractors provided they are capable and must provide the following:

1. CIPC Certificate
2. COIDA
3. Tax certificate & CSD
4. CIDB grading certificate

C3.4: CONSTRUCTION**C3.4: STANDARD SPECIFICATIONS****C3.4.1 WORKS SPECIFICATION**

The following specifications shall apply for the construction of the Works.

C3.4.1.1 STANDARD SPECIFICATIONS

The COTO Standard Specifications for Road and Bridge Works for State Road Authorities (2020 Edition) shall apply for the construction of the Works.

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

The term "Engineer" must be replaced by "Employer's Agent" wherever it appears in these standardized specifications.

This document is obtainable separately, and Tenderers shall obtain their own copies of the applicable Sections.

C3.4.1.2 NATIONAL AND INTERNATIONAL STANDARDS

The SANS or BS Specifications and Codes of Practice shall apply for the construction of the Works.

Wherever any reference is made to the South African National Standards (SANS) and the British Standards Specification (BSS) in either these Bill of Quantities or the Specification of Materials and Methods to be used (OOG-001E), this reference shall be deemed to read "SANS or equivalent standard" and BS or equivalent standard" respectively.

C3.4.1.3 PARTICULAR SPECIFICATIONS

The following particular specifications shall apply for the construction of the Works. Various other specifications specified in the COTO Standard Specifications or the Project Specifications.

Latest Sabita Manual, Manual 25 entitled "Quality Management in the Handling and Transport of Bituminous Binders".

TG3 3rd Edition – January 2022., Technical Guideline for Asphalt Reinforcement for Road Construction" Issued by SABITA.

C3.4.1.4 AMENDMENTS TO THE COTO 2020 EDITION STANDARDIZED SPECIFICATIONS

In certain clauses the standard, standardized and particular specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternative or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains

additional specifications required for this particular contract.

The number of each clause and each payment item in this part of the project specifications consists of the prefix PS followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or payment item, which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by PS, but followed by a new number which follows on the last clause or item number used in the relevant section of the standard specifications.

PS C1.2	GENERAL REQUIREMENT AND PROVISIONS
PS C1.2.1.1	Monitoring of compliance with and reporting on the EMP
	In addition to the standard specification, all requirements according to the Environmental Management Plan as detailed in C3.4: Particular Specifications, will be adhered to.
PS C1.2.1.2	Dedicated Environmental officer
	The Environmental Control Officer (ECO) shall conduct the following activities: • Brief the Contractor about the requirements of the Environmental Specification, Environmental Management Plan and any other relevant document, specification or Act as applicable. • Audit, monitor, report and keep a record of the performance of the Contractor / Project in terms of environmental compliance on a monthly basis. • Provide technical advice relating to environmental issues as required. • Attend monthly site meetings to report on the performance of the Contractor / Project Conduct a close out audit and report on the Project once the construction camp has been cleared.
PS C1.2.2.3	Submission of Scheme 2 Programme
	It is essential that the construction programme, which shall conform in all respects to Clause 5.6 of the General Conditions of Contract, be furnished within the time stated in the Contract Data (refer to Clause 5.3.1). The preliminary programme to be submitted with the tender shall be used as basis for this programme. The Tenderer's attention is drawn to the fact that a number of factors will affect the programming of and method of carrying out the works. The more important of these are: (a) Items mentioned in addition to PS1, (b) All pavement designs to be done and submitted at-least one month before the pavement is to be laid. Those known, existing services in the area of the works have been depicted on the contract drawings. It is evident, however, that the status of existing service records as far as can be ascertained might not reflect the actual situation in the field. As such, due allowance has been made in the Bill of Quantities for the proving of services where directed by the Engineer.
PS C1.2.2.5	Reviewing and Updating a Scheme 2 Programme every month:

	The contractor shall update the programme every month and submit to the Engineer. The Contractor shall revise the programme when instructed to do so by the Engineer in accordance with the requirements of the Conditions of Contract or when the Contractor is aware that the programme no longer reflects the way in which the Contractor plans to execute the remaining work. Payment shall be made only upon the revised programme being accepted by the Employer's Agent, regardless of the number of iterations / revisions / corrections made before the programme was accepted by the Employer's Agent.
PS C1.2.3.7	Base and/or Surface Patching using Hot Plant Mixed Asphalt:
	In addition, the rate shall include for saw-cutting the failed asphalt, application of a tack coat, supply and compact the asphalt to a level to suit to the existing road, including loading, hauling and disposal of the failed asphalt, all labour, plant, tools and equipment.
PS C1.3	THE CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS
PS C1.3.1	The Contractor's General Obligations:
	In addition to the Standard Specification, the Contractors General Obligations shall also include: • Training and supervision of local labour • Management of labour where labour enhance construction methods are specified • Compliance with, and application of the Compensation for Occupational Injuries and Diseases Act • The Contractor's camp site and store yard. Note: The Contractor's office for this contract shall be as required to fulfill his obligations under the Contract. The Contractor is responsible to provide a suitable site for his camp and to provide accommodation for his personnel and labourers. If the Employer can make any specific site available to the Contractor, such site will be pointed out to the Contractor. However the Contractor may, if he prefers to, have a camp site at another location and must first obtain the written permission of the landowner, and subsequently the Engineer, to do so. Any clearing of the site that is necessary and the making good after de-establishment will be the responsibility of the Contractor. The following conditions shall also apply: - None of the existing roads shall be damaged in any way. - No waterborne sewerage facilities or potable water connection are available on the site. The Contractor shall make his own arrangements in this regard. - No electrical facilities exist on site. - It shall be the responsibility of the Contractor to make good any damage caused to the camp site area or any improvements on it, including services, and for reinstating it to its former condition when vacated. Particular attention should be directed to these requirements and written clearances from the relevant Departments or other owners will be required.

	No employees except for security guards will be allowed to sleep or be accommodated on the site in urban areas. No housing is available for the Contractor's employees and the Contractor shall make his own arrangements to house his employees and to transport them to site. No informal housing or squatting will be allowed. Chemical toilets only will be allowed where temporary facilities have to be provided.
PS C1.3.2	Contract Sign Boards:
	The typical notice board layout is given in section C3.6. The tendered rate shall include full compensation for providing and erecting each sign board (two), including for timber poles, concrete bases if required, fixings, excavation and backfill, and for the later removal of the sign board, structures and fixings, and reinstating the area upon completion of the contract. The rate shall include for all labour, plant, tools, materials and equipment.
PS C1.4	FACILITIES FOR THE ENGINEER
	General: The offices and ablution facilities shall, unless otherwise agreed, be erected in close proximity to the Contractor's offices, and the entire area shall be fenced. Access to the area shall be controlled by security, posted at the gates. All reasonable precautions shall be taken by the Contractor to prevent unauthorized entry to the Engineer's offices.
PS C1.4.1.1	Offices and Conference Room
	The Engineer's offices shall comprise of: - 1 No. (one) lockable, air-conditioned offices with area of 9 to 12m², all fully furnished - 1 No. (one) of 18m² air-conditioned office to be used as a boardroom - 1 No. (one) sanitary facilities - 1 No. (one) kitchen with cupboards, and hot and cold water, and - 2 No. (two) shaded carports for the sole use of the Engineer, his site personnel and the Employer. The offices shall allow for a desk with 4 drawers, filing cabinet, drawing racks, 1 swivel chair and 2 padded chairs. All the necessary insurance shall to be provided for all the above equipment. The contractor will be required to provide maintenance/cleaning to the Engineer's office.
PS C1.4.1.2	Power supply, water and other services
	The Contractor shall make his own arrangements concerning the supply of electrical power, water and all other services. No direct payment will be made for the provision of electricity, water and other services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required, or in the Contractor's preliminary and general items as the case may be. (a) Water for Works

	The Contractor shall allow in his Establishment rates for the securing of a suitable water supply, the payment of any connection fee and for any water charges for the duration of the contract. (b) Power Supply for Works The Contractor shall allow in his Establishment rates for the securing a legal electrical connection, the payment of any connection fee and for any electrical charges for the duration of the contract.
PS C1.4.4.17	Provision for Dispute Adjudication Board
a)	Provision for Dispute Adjudication Board (including appointment, meetings, reports, retainers, and possible hearings):
	The provides sum shall cover the cost for the provision of the Dispute Adjudication Board including the following but not limited to: • Appointment of the suitably qualified Board Members • Preparation of necessary documentation and reports • Retainers • Possible hearings, • Etc Any additional costs beyond the provided provisional sums as stated under this item shall be split equally between the Employer and the Contractor as stipulated under the GCC 2015, Adjudication Board Rules, Clauses “4.3 Remuneration of Ad-hoc Adjudication Board Members” and Clause “5.5 Remuneration of Standing Adjudication Board Members” in their entirety as documented in the GCC 2015, Correction to the First Print Version 5.0 – April 2020.
b)	Handling costs and profit in respect of item PS C1.4.4.17 a)
	The percentage under item PS C1.4.4.17 b) is the percentage of the amount spend under item PS C1.4.4.17 a)
PS C1.6.11	Removal and disposal of surfaces
	The rates for the removal of all surfaces (as stated in the BoQ) and disposal thereof, shall cover the costs for the provision of all required material, equipment, tools, labour, loading, transporting and disposing off at the suitable site. The rate shall also cover for all mandatory compliance to the environmental and the health and safety requirements.
PS C1.6.12	Removal and disposal of kerbing with channels
	The rates for the removal of all kerbing and channels (as stated in the BoQ) and disposal thereof, shall cover the costs for the provision of all required material, equipment, tools, labour, loading, transporting and disposing off at the suitable site. The rate shall also cover for all mandatory compliance to the environmental and the health and safety requirements.
PS C1.6.13	Removal and disposal of Culvert inlets and outlet structures
	The rates for the removal of all culvert inlets and outlet (per the arrangements and configuration as stated in the BoQ) and disposal thereof, shall cover the costs for the provision of all required material, equipment, tools, labour, loading, transporting and disposing off at the suitable site. The rate shall also cover for all mandatory compliance to the environmental and the health and safety requirements.

PS C1.6.14	Cleaning of hydraulic structures
	The rates for the cleaning of all hydraulic structures (per the arrangements and configuration as stated in the BoQ), shall cover the costs for the provision of all required material, equipment, tools, labour, loading, transporting and disposing off at the suitable site. The rate shall also cover for all mandatory compliance to the environmental and the health and safety requirements.
PS C2.2	GENERAL REQUIREMENTS AND TRENCHING FOR SERVICES
PS C2.1.1.1	Contractors Obligations:
	Before any work commences, the Contractor shall contact all private owners or public authorities controlling services so that they may, either protect, move or relocate any service as required, or confirm that all such work has been completed. Payment will not be made for any inconvenience caused to the Contractor in regard to any services crossing the site or any authority working on or relocating any such services, nor will any delays caused by such work or relocation be accepted as a basis for claiming an extension of time for completing the works. All known existing services and those services which require relocation and protection, are shown on the services plans. The Contractor's attention is drawn to the fact that such services information is based on information supplied by others, and the accuracy and completeness of this information has not been confirmed. The Contractor will therefore be required to proceed with extreme caution in order to avoid damage to existing services. Before commencing any work in the vicinity of services, the Contractor shall contact the relevant service authorities for assistance in locating the exact position of the services and where necessary the Contractor shall accurately locate the services by careful hand excavation. In general, the Engineer may call upon the Contractor to re-excavate trenches previously dug and backfilled by others where in the opinion of the Engineer such work is necessary to ensure the stability of any other works over such trenches. This in no way relieves the Contractor of his responsibilities in terms of the works.
PS C2.1.1.2	Permanent Services relocation or protection work by others
	The tenderers shall source quotations with 10% mark-ups for the relocation and the protections of the services as by others for the works as listed in the BoQ. A list of all service providers is provided. The Engineer in Liaison with the CoM Wayleave department shall invite the affected utility service providers to a kick off meeting with compulsory attendance of all tenderers for the purpose inspections and provision quotes thereof by the service providers to the individual tenderers.
PS C2.1.6	Trench Excavation
	The Tenderer's attention is drawn to the presence of existing services in the area. The Contractor may find it impractical to use mechanical plant for excavation on some portions of the works due to conditions caused by the presence of these services. The Tenderer's attention is further drawn to the fact that his rates for excavation and backfilling must include for all costs associated with working around these existing services and their protection and accommodation, as no claim for extra payment will be accepted for increased working space or for the inability to use plant in any circumstances. The following requirements in respect of trench excavation, backfilling and reinstatement shall be adhered to:

- 1) It is considered that portion of the excavated material will not comply with the specification for material suitable for backfilling. It will be the Contractor's responsibility to use selective methods of excavation to ensure that this unsuitable material does not contaminate other materials suitable for reuse.
- 2) It is considered that portion of the excavated material will not comply with the specification for material suitable for backfilling in areas subject to traffic loading. An item has been included in the Bill of Quantities for the disposal of unsuitable material to tip and the Contractor's tendered rate for this item shall include for stockpiling if deemed necessary.
- 3) Where the Contractor chooses to trench by open excavation e.g. battering sides of the trenches, this over-excavation shall not be backfilled with unsuitable excavated material but shall be backfilled with the same imported material as used for the pay-width of the trench. Payment for the imported backfill shall be limited to the pay-width of the trench only and the Contractor shall allow in his rates for any extra backfill material that may be required as a result of over-excavating
- 4) Notwithstanding the method of trench excavation adopted by the Contractor, the restriction on the maximum trench width must be strictly adhered to. Should the Contractor over-excavate the trench then he will be responsible for increasing the pipe strength and / or bedding class to be used, all to his cost.

The measurements for excavation shall be the total through-length along the centre-line of a pipeline measured HORIZONTALLY with deductions for manholes. In addition, trench depth will be measured vertically on the centre-line of the pipeline from the existing ground level to the invert level.

PS C2.1.16 Subsurface Drains in Trench Bottoms:

The unit of measurement shall be the metre of subsoil drain constructed complete as specified or shown on the drawings.

These shall be "Netlon" plastic subsoil pipes complying with SABS 791 as amended, or the new Flo Drain system.

Hole Size : 5 □ 1 mm Diameter

Diameter of Pipe: 100 □ 10 mm.

Pipe Invert : 25% of the circumference of the pipe is to be free from slots or holes to form an invert to the pipe.

The outfall end of each run of subsoil drain shall be built into the nearest inlet/manhole or headwall.

The stone aggregate used for the subsoil drain filter shall consist of 9,5 mm crushed stone conforming to the following grading:

Sieve size mm	132	95	67	475	236
% Passing	100	85 - 100	0 - 55	0 - 25	0 - 5

River sand for subsoil drain filter shall consist of clean river sand conforming to the following grading :

Sieve size mm	67	475	150	75
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	<table><tr><td>% Passing</td><td>100</td><td>90 -100</td><td>0 - 15</td><td>0 – 3</td></tr></table> and having a Fineness Modulus of 2,0 - 3,5. The geofabric shall include for wrapping the geofabric around either the subsoil pipe, subsoil drain or stone bedding The tendered rate shall include full compensation for constructing the subsoil drain complete, including excavation by hand in soft material, the supply and installation of geotextiles and pipes and the supply and placing of any drainage aggregate. The rate shall be subject to an extra over-payment under item C2.1.7 and shall also be subject to additional payment under item C2.1.17 for the removal disposal of any surplus or unsuitable excavated material to spoil sites provided either by the Employer or the Contractor.	% Passing	100	90 -100	0 - 15	0 – 3
% Passing	100	90 -100	0 - 15	0 – 3		
PS C2.1.28	Provision of new services					
PS C2.1.28.1	Provision of traffic signals					
a)	Provision of New Traffic Signal					
	The cost for the provision of traffic shall cover the full procurement of lights, poles, cabling, control boxes and all the necessary equipment, tools, material, labour, etc, as required for the full installation, testing and commissioning of the traffic signals in with the provided designs in Annexure C as per the requirements of City of Mbomela. The cost shall be based on Overhead (Cantilever) Traffic Signals. The Contractor shall provide a minimum of three (3) reasonably competitive quotations for approval by the Engineer prior to the procurement and installation thereof. Unit of Measure: Sum					
b)	Relocation of Traffic Signals and upgrading phasing, timing, etc					
	The cost for the provision of traffic shall cover the full removal, storing and re-installation to new location of the lights, poles, cabling, control boxes and all the necessary equipment, tools, material, labour, etc, as required for the full re-installation to new locations, testing and commissioning of the traffic signals in with the provided designs in Annexure D as per the requirements of City of Mbomela. The cost shall include the reprogramming of the timing phase, etc, as per the provided Traffic Design Data in Annexure D. The cost shall also cover for the full compensation for the procurement of any replacement thereof of faulty or outdated parts/components as listed above. The Contractor shall provide a minimum of three (3) reasonably competitive quotations for approval by the Engineer prior to the procurement and installation thereof. Unit of Measure: Sum					

PS C2.1.28.2	Additional Traffic Signals (Cantilever Type)
	Preamble
	1. The Scope shall encompass the following 1.1 Status Quo and Review • Liaison with project team and 2 meetings with the road traffic authorities (Virtual). • Undertake a status quo assessment of the existing road network within the study area, inclusive of public transport, pedestrian, cycling facilities and road safety. • Collect 12 hour classified traffic counts at 4 intersections (6Am-6PM) including Saturday (9AM-2PM) for Intersection 1 (Access to Kanyamazane Centre). 1.2 Analysis • D2296/Chris Hani Intersection Operation Schedule Preparation • Analysis of x4 intersection using the Sidra software. • Determine traffic signal queue length warrants as per SARTSM V3 for 4 intersections. • Carry out traffic signal design (if warranted) for 4 intersections • Carry out Traffic Signal Operation schedule (If warranted) for 4 intersections 1.3 Report and Layouts • Prepare TSW investigation and design report. • Prepare Traffic Signal Design Layout Plan for D2296/Chris Hani Street and the 4 aforementioned intersections (where traffic signals are warranted).
a)	Traffic Counts
	The cost shall include the undertaking of traffic counts by a Specialist Supplier to conduct traffic counts at the affected intersections. Refer to 1.1 above. Unit of Measure: No
b)	Traffic Count – Intersection 1 Saturday
	The cost shall include the undertaking of traffic counts by a Specialist Supplier to conduct traffic counts at the affected intersection (Vukuzimele Street/ D2296 Road). Refer to 1.1 above. Unit of Measure: Sum
c)	Traffic Singal Warrant Investigations
	The cost shall include the undertaking of traffic signal warrant investigation by a Specialist Supplier to conduct investigation and provide a report. Refer to 1.2 and 1.3 above. Unit of Measure: No
d)	Traffic Singal Design, Supply and installation
	The cost shall include the undertaking of traffic signal design by a Specialist Supplier. Refer to 1.3. The cost shall include the undertaking of traffic signal supply and installation by a Specialist Supplier.

	Unit of Measure: Sum
e)	Traffic Singal Layout Plans
	The cost shall include the undertaking of traffic signal layout plans by a Specialist Supplier to produce the required layout drawings. Refer to 1.2 and 1.3.
	Unit of Measure: No.
f)	Traffic Signal Operation Schedule for D2296/ Chris Hani Street intersection
	The cost shall include the undertaking of traffic signal operational schedule by a Specialist Supplier to produce the required reports and documentation. Refer to 1.3.
	Unit of Measure: Sum
PS C2.2.1.1	Cable Ducts
	The following ducts shall be used for this aspect of the project. 110mm or 160mm ribbed HDPE duct (Kabelflex or similar approved). On completion of duct laying and backfilling, the ducts shall be proved by twice pulling through a cylindrical cleaning brush, once in each direction. The ducts shall then be proved by drawing through a wooden or Teflon mandrel 400mm long and 5mm less in diameter than the duct. The sub-contractor shall provide a method statement for carrying out of the duct proving
C3.2	CULVERTS
PS C3.2.3.2	Drainage Pipes and Culverts:
	<i>A3.5.2 Culvert Material</i> c) <i>Prefabricated concrete pipe culvert units</i> – Replace “Ogee joints” with “Spigot and Socket pipes” Reinforced concrete pipes for stormwater shall - - comply with S.A.B.S. 677 for S.C. type pipes without lifting holes; - be manufactured with a spigot and socket type joint suitable for use with a rubber ring joint; and - comply with the proof load requirements for the various classes of pipe as indicated on the contract drawings and/or in the schedule of quantities. The rubber ring joints shall comply with S.A.B.S. 974 - Part 1. Laying: All pipelaying and jointing shall be undertaken by experienced pipelayers who shall, when requested, produce proof of their capabilities to the satisfaction of the Engineer. The various types of pipes and culverts shall be handled and laid in accordance with the manufacturer's instructions. The Contractor shall provide the latest copy of the instructions and shall ensure that all pipe layers have a good working knowledge of the required procedures. Notwithstanding anything contained in the instructions, the Engineer's interpretation shall be final. Pipes and culverts shall be lowered gently and carefully into the trench without jarring or bumping by crane, derrick, or other approved lifting tackle and care shall be taken not to damage the items. The hand installation of pipes shall only be permitted when using U.P.V.C. or A.C. pipes up to a nominal diameter of 150 mm unless authorised by the Engineer. Control of the level and line of the pipeline, to ensure correct placing to designed line and level, shall be by side and top lines or other acceptable means approved by the Engineer.

All internal surfaces of pipes and fittings shall be kept clean and free of foreign matter both during and after laying. The surfaces of all joints shall be thoroughly cleaned before the pipe or special is placed in its final position. No water shall be allowed to come in contact with or run through any pipe before the joint has been completed and at no time shall muddy, clayey or dirty water be allowed to enter the pipe.

Exposed ends of pipe and fittings in the trench shall be sealed by suitable end caps at all times when pipelaying is not actually in progress.

Laying shall commence at the lower end of the trench and proceed upgrade. Pipes and fittings must be laid with their spigots or male end pointing in the direction of the flow. All pipes and culverts shall be laid in a straight line, both in the horizontal and vertical plane, between adjacent manholes or catchpits except where shown on the contract drawings or directed by the Engineer.

Each pipe, fitting or culvert unit shall mate uniformly with the next to preserve an invert free from steps. Except with the prior consent of the Engineer, the laying of pipes and the bedding cradle, if specified, between any two consecutive manholes shall be checked by the Engineer's representative for line and level before the selected fill blanket is placed.

Where pipes are required to be cut on site, only manufacturer's recommended special machines shall be used and the resultant pipe end must be clean and uniform.

No pipes shall be left overnight or during rainy weather without sufficient backfilling between pipe couplings to prevent flotation. Where pipes are indicated on the contract drawings to be laid to a horizontally curved alignment the pipes must be fully jointed in a straight line and subsequently deflected with the previously laid pipe suitably anchored to prevent movement. Care must be taken to ensure the pipes are laid in a smooth curve with equal deflections at each joint.

Jointing:

All pipe joints and the operation of jointing shall be carried out strictly in accordance with the pipe suppliers instructions. In particular:

- A. all rubber rings and seals shall be carefully inspected after being placed in position and before the joint is closed to ensure that they have not suffered any cuts, tears or other damage and are not in any other way defective;
- B. care shall be taken to ensure that:
 - I. all jointing surfaces are cleaned immediately prior to jointing;
 - II. the joint gaps in the bedding remain clear and the alignment of the pipe remains true;
 - III. the full weight of the pipe does not rest on the rubber ring during jointing;
 - IV. pipes with damaged jointing surfaces are not used in the pipe run between manholes but are set aside for building into manhole walls etc.;
- C. pipes and fittings of different materials shall be jointed only with special adaptors recommended by the pipe manufacturer; and
- D. where a pipeline passes through a rigid structure and to prevent possible shear failure of the pipe, two flexible joints shall be positioned on each side of the structure. These shall be positioned 0,3 m and 0,8 m respectively from the nearside faces of the structures.

Concrete Encasement of Pipes:

The lower part of the encasement shall be constructed as for a class A bedding. Once the line has been tested and approved, the encasement of the pipes shall be

completed, care being taken to ensure that the expansion joints in the upper part of the encasement coincide with that in the lower part. No backfilling over the concrete shall be commenced until the concrete has achieved a compressive strength of 15 MPa.

Pay Trench Width:

For payment purposes only, where measurement is specified by volume and a pipe is to be laid, the pay trench width shall be as indicated in the table below which is based on the excavation having vertical sides. Wherever the pay width is used to compute the measurement of volume in the following measurement and payment items provision shall be allowed in the rates for additional excavation necessary to either shore or batter back, the trench sides, if open battered trench excavations is permitted.

Nominal Diameter (mm)		Trench Width (mm)
over	Up to	
0	100	700
100	700	nominal internal diameter plus 600
700	1000	" plus 800
1000	2000	" plus 1 000
2000	-	" plus 1 200

Pipe laying shall also include: compaction of bedding, the laying, including curved alignment where specified, building pipes into manholes, catchpits and through rigid structures, all cutting and wastage of materials.

**PS C
3.2.15.2**

Manholes

The tendered rate for these items shall be the number of complete manholes or inlet units (as shown on the drawings, including all concrete, blinding brickwork, covers, frames, grids and other accessories) that fall within the designated depth ranges listed. Standard drawings refer to drawing nos. **RC-2296-SW-SD-004**

The tendered rates shall include full compensation for the supply and installation of any precast elements as required to complete the manholes and catchpits, supplying, testing, loading, transporting and off-loading of all items, providing and placing, and installing, laying and jointing the prefabricated elements as specified, including cutting on the site, and waste. Where precast elements are installed on cast in situ concrete floors or walls or on brickwork walls, no additional payment shall be made for any additional costs arising from the change between cast in situ and precast work. No additional payments shall be made for working in depths greater than 1.0m (payment item C3.2.15.4 shall not apply). The rate shall further cover the cast-in-situ concrete, including the channel with serrations, mixing, laying, float finishing, setting out, all supervision, plant, labour, equipment, materials, protection and incidentals necessary to complete the work as specified.

Unit of Measure: Number (No.)
Refer to COTO A3.2.

Inlets

The tendered rate for these items shall be the number of complete manholes or inlet units (as shown on the drawings, including all concrete, blinding, brickwork,

	covers, frames, grids and other accessories) that fall within the designated depth ranges listed. Standard drawings refer to drawing The tendered rates shall include full compensation for the supply and installation of any precast elements as required to complete the manholes and catchpits, supplying, testing, loading, transporting and off-loading of all items, providing and placing, and installing, laying and jointing the prefabricated elements as specified, including cutting on the site, and waste. Where precast elements are installed on cast in situ concrete floors or walls or on brickwork walls, no additional payment shall be made for any additional costs arising from the change between cast in situ and precast work. No additional payments shall be made for working in depths greater than 1.0m (payment item C3.2.15.4 shall not apply). The rate shall further cover the cast-in-situ concrete, including the channel with serrations, mixing, laying, float finishing, setting out, all supervision, plant, labour, equipment, materials, protection and incidentals necessary to complete the work as specified. Unit of Measure: Number (No.) Refer to COTO A3.2.
PS C3.2.9	Headwalls
	The tendered rate for these items shall be the number of complete headwalls (as shown on the drawings, including all concrete, brickwork, and other accessories). Standard drawings refer to drawing The tendered rates shall include full compensation for the supply and installation of any precast elements as required to complete the headwalls, supplying, testing, loading, transporting and off-loading of all items, providing and placing, and installing, laying and jointing the prefabricated elements as specified, including cutting on the site, and waste. Where precast elements are installed on cast in situ concrete floors or walls or on brickwork walls, no additional payment shall be made for any additional costs arising from the change between cast in situ and precast work. The rate shall further cover the cast-in-situ concrete, energy dissipation blocks, mixing, laying, float finishing, setting out, all supervision, plant, labour, equipment, materials, protection and incidentals necessary to complete the work as specified. All headwalls shall be cast in-situ unless otherwise stated. The use of prefabricated Units may be used subject to approved by the Engineer prior to use. Prefabricated units, drawings, specs and installation methodology shall be issued to the engineer minimum of 3 weeks prior to its programmed construction. Unit of Measure: Number (No.) Refer to COTO A3.2, A.2.7.11
PS 3.2.28	Removal of brickwork from manholes/inlets:
	The unit of measurement is cubic metre (m³) net in place before demolition. The rate shall cover the complete demolition of the structure and associated works and disposal of the material to an approved tip. Backfilling of any resulting cavities shall be paid for separately.
PS C3.2.30	Raising or lowering of Existing Manholes and inlets:
	The unit of measurement shall be number (No.) measured in increments of 0,25 m in paved or unpaved areas. The tendered rate shall include for the removal of the existing adapter slab, cover and frame, storing on site for re-use, demolition of the manhole as necessary,

	provision of labour and materials for rebuilding the manhole to the designated new level and setting and cover and frame to the correct level. Extra Over items for the various types of cover and frame will be scheduled if new covers and frames are to be provided. The Extra Over rate should include for the supply of the new covers and frames and the removal from site of the old ones.
PS C3.3.2.1	Precast Concrete Kerbing and Cast In-situ Channeling
	The grade of concrete for all cast in-situ work shall be grade 20/13 The sealer shall conform to B.S.4254 - Two part polysulphide based sealants for the building industry, as amended. All kerbs shall be precast, supplied in 1 m lengths and shall conform to the requirements of S.A.B.S. 927 - Precast concrete kerbs and channels. If the curve radius is less than 25 m, but greater than 2 m, the maximum permissible length of kerb shall be 300 mm. Where the kerb radius is less than 2 m the kerb and channel shall be cast-in-situ. It is essential that moulds are manufactured and braced from a material which will not warp or distort after repeated use. Kerbs and in-situ channels shall be laid on a concrete foundation true to line and level to the dimensions shown on the contract drawings. The correct grade and line shall be maintained by use of an approved cord or line. The Contractor shall place sufficient pegs to ensure that the kerbs are laid on a true curve and NOT in a series of chords. Levels shall be adhered to strictly, particularly when graded channels are required between inlets. Kerbs shall be laid with a 13 mm gap and this joint shall be filled with cement mortar and the outside face of the joint shall be struck with a semi-circular jointer. In addition, suitable expansion joints 13 mm in width shall be provided at $\pm 18,0$ m centres through kerb, channel and supporting concrete. This joint shall consist of a compressible material and polysulphide filler which shall match the colour of the concrete. Unless otherwise stated in the drawing, the interface between the channel/fillet and the road asphalt is the sett position, as such the kerbs and channels/fillets shall be constructed relative to the sett position and true to level. The precast items and cast-in-situ channels/fillets shall be protected from damage from the remaining road construction operations. For COTO item C3.3.2.1, the Kerb only shall be prefabricated, and all other components shall be cast in-situ (channels, backing, base etc.) The unit of measurement shall be the metre (m) and the rate shall cover the supply of all precast items, including transporting, loading, laying and jointing (including all expansion joints and sealer), cast-in-situ concrete foundation, including mixing, laying, float finishing, setting out of kerb and channel, all supervision, plant, testing, labour, equipment, materials, protection and incidentals necessary to complete the work as specified. Unit of Measure: Meter (m) Standard drawings refer to drawing
PS C3.3	CONCRETE KERBING AND CHANNELING, ASPHALT BERMS, CHUTES, DOWNPIPES, AS WELL AS CONCRETE, STONE PITCHED AND GABION LININGS FOR DRAINS
PS C3.3.6.4	Down chute structures (as per drawings)
	Add the following additional Sub-Clause after C3.3.6.3

	“C3.3.6.4 Down chutes structures (as per drawings): For Type 1 Chutes: (a) Inlet Structures (Low-point) (b) Inlet Structure (Downstream) For Type 2 Chutes: (a) Inlet Structures (Low-point) (b) Inlet Structures (Downstream) (c) Stilling basin” The rate provided shall for the procurement and transporting of all required material, equipment, tools, plant, labour, etc for the installation of the structures. The cost shall also cover for the full installation of the structures to the drawing specifications and to the Engineer’s satisfaction. Unit of Measure: Number (No.)
PS C3.3.17	Kerb Inlets (as per drawings)
	Add the following New Clause after Clause C3.3.16 “PS C3.3.17 Kerb Inlets (as per drawings): (a) Low-Point Kerb Inlet (as per drawings) (b) Sloping Kerb inlet (as per drawings) The rate provided shall for the procurement and transporting of all required material, equipment, tools, plant, labour, etc for the installation of the structures. The cost shall also cover for the full installation of the structures to the drawing specifications and to the Engineer’s satisfaction. Unit of Measure: Number (No.)
PS C4.2	CUT MATERIALS
PS C4.2	Earthworks
	Add the following after the last paragraph of (i) Preamble “Tenderers are to note that all topsoil from site is to be excavated to stockpile for later use. Cut material should ideally be moved directly to fill unless there are circumstance that prevent the contractor from doing so. Moving of material from cut to stockpile shall only be done with the approval of the Engineer. The exact location shall be pointed out by the Engineer. The unit of measurement shall be cubic meter (m³) and shall include for labour, plant, and material. The nature of the roadworks is such that a fair amount of the excavation shall be in concrete / asphalt / intermediate / hard and soft materials. Quantities for any concrete / asphalt requiring breaking up with the use of excavators / breakers shall be measured prior to excavation and agreed upon by the Engineer. <u>No</u> additional payment shall be made for restricted excavation and the Tenderer shall therefore make due allowance in the rates for any additional work or hand excavation.”

	Excavation of Road Layers:
	Existing road layerworks, excluding the asphalt, shall be excavated as restricted excavation ensuring no contaminating between layers and either: (a) storing on site for re-use, or; (b) spoiling at an approved tip site. The Contractor's rate for the removal of the layerworks, excluding the asphalt, shall include for the full operation, inclusive of haulage, and is to include for the restricted operation as well.
	Excavation of Asphalt and Concrete in Road
	The unit of measure is cubic meters (m³). The rate shall cover labour and plant necessary for removal of abandoned roadways, sidewalk / median, concrete sidewalks, scoops, pedestrian and vehicular, interlocking blocks, asphalt paving and brick paving.
PS C4.4	COMMERCIAL MATERIALS
PS C4.4.4.1	Cementitious Stabilising Agents:
	The cement used shall conform to SABS ENV 197-1 and shall be classified as CEM III/A 32.5 respectively Prior to the commencement of paving of the layer the Contractor shall construct a section of trial layer to demonstrate his capability of constructing the layer in accordance with the specifications. The trial layer shall be constructed with the same materials, mix proportions and equipment as the Contractor intends using for the main layer. A trial section of not less than 50 m² shall be submitted for approval. The Engineer shall also have the right to call for a new trial section at any stage of the contract when, in his opinion, changes by the Contractor in the approved equipment, materials, mix or plant warrant such a procedure. The Contractor may, unless advised of any deficiencies in the trial layer, proceed with the main layer from a time ten days after the completion of the trial section or such earlier time as the Engineer may allow. In the event of deficiencies in the trial layer, the Engineer may order the Contractor to construct further trial sections until a satisfactory section is achieved. The Contractor may then proceed with the main layer from a time ten days after the successful completion of the satisfactory trial section. An item has been provided in the BOQ for the trial layer section.
PS C5.1	ROADBED
PS C 5.1.1.2	Roadbed Construction
	Any particle size greater than 100 mm within this layer shall be removed and replaced with suitable material. The whole of the roadbed, except where stabilised shall then be proof-rolled with a vehicle having a minimum wheel load of 20 kN in order to determine any soft spots. The Contractor is responsible for protecting the formation at all times. No construction traffic that is likely to cause damage shall be allowed on the formation. Preparation of the formation shall only be carried out after all services and ducts have been laid. Soft spots shall be removed and replaced with suitable material and compacted in accordance with the specification.
PS C6.2	SEGMENTAL BLOCK PAVING LAYERS

Smoothness Applicable to Wearing Course

Concrete paving blocks shall comply with the requirements of SABS 1058. The block shall be of the class, type and thickness specified in the Contract Documentation. The surface texture and colour of all blocks shall be uniform.

A6.2.5.2 Bedding sand

Bedding sand shall not contain any silt, clay or other deleterious impurities. The sand shall comply with the following grading requirements in Table A6.2.5-1.

Table A6.2.5-1: Grading requirements for bedding sand

Sieve size (mm)	Percentage passing by mass
7,1	100
5,0	95 – 100
2,0	80 – 100
1,0	50 – 85
0,600	25 – 60
0,300	10 – 30
0,150	5 – 15
0,075	0 - 10

A6.2.5.3 Jointing sand

100 % of the sand used to fill the joints between the concrete blocks shall pass through a 1,0 mm sieve and between 10 % and 15 % of it shall pass through a 0,075 mm sieve.

A6.2.5.4 Concrete beams, kerbs and channelling

Cast in situ concrete edge beams or intermediate beams shall be constructed in accordance with the provisions of Chapter 13: Structures, as relevant. Prefabricated kerbing and channelling shall comply with the requirements of Section A3.3 or Section B3.3 of Chapter 3 as specified in the Contract Documentation.

A6.2.5.5 Herbicide and ant poison

The herbicide and ant poison shall be environmentally friendly and shall be subject to the Engineer's approval.

A6.2.6 CONSTRUCTION EQUIPMENT

A suitable vibrating-plate compactor shall be supplied operating at a frequency of 65 Hz to 100 Hz and a low amplitude. Its plate surface shall be 0,2 m² to 0,4 m² and it shall develop a centrifugal force of 7 kN to 16 kN..

A6.2.7 EXECUTION OF THE WORKS**A6.2.7.1 Preparing the underlying layers**

The underlying pavement layer/s shall be as specified in the Contract Documentation. The underlying pavement layers shall be constructed and prepared in accordance with the requirements for the relevant pavement layers in Chapters 4 and 5 of these specifications, or as may be specifically otherwise prescribed in the Contract Documentation. Where specified by the Engineer the prepared surface shall be treated with approved herbicide and ant poison before the layer of sand for bedding is placed.

A6.2.7.2 Concrete edge and intermediate beams

Cast in situ or prefabricated concrete edge beams or intermediate beams shall be constructed on the underlying pavement layer in accordance with the details shown on the drawings. No paving blocks shall be laid before the edge and intermediate beams have developed sufficient strength to withstand the construction forces.

A6.2.7.3 Bedding sand

A layer of bedding sand complying with the requirements of Clause A6.2.5.2 shall be placed on top of the prepared surface of the underlying pavement layer. It shall be accurately levelled to an un-compacted thickness of 25 mm ($\pm 5,0$ mm), or as specified, so that the concrete paving blocks will have the correct level after compaction. The bedding sand shall be placed immediately before the concrete paving blocks are laid and shall be allowed to dry out to permit upward creep during compaction. The sand shall not be compacted before the blocks have been laid.

A6.2.7.4 Laying of the blocks

The blocks shall be laid in the pattern shown on the drawings or as directed by the Engineer. Unbroken blocks shall be laid first and the filler pieces afterwards. Filler pieces shall be neatly sawn or hewn to fit exactly into the space to be filled. Any space of which the size is less than 25 % of the size of an unbroken block, shall be filled with 35 MPa concrete. The size of the joints between blocks shall be between 2,0 mm and 4,0 mm, and the top faces of the blocks shall be flush.

After the paving blocks have been laid, the pavement shall be compacted by two passes of a suitable vibrating-plate compactor operating at a frequency of 65 Hz to 100 Hz and a low amplitude.

After compaction of the pavement as described above, jointing sand shall be spread and brushed into the joints until the joints have been properly filled. Any surplus sand shall then be broomed off and the pavement shall then be subjected to two further passes by the plate vibrator. Jointing sand shall not be hosed into the joints. The block paving shall be inspected after 2 months, and the joints shall be resanded where required.

A6.2.8 WORKMANSHIP

A6.2.8.1 Construction tolerances

The completed concrete block paving shall comply with the following construction tolerances:

- a) Line of pattern

	(i) Maximum deviation from a 3,0 m straight edge: 3,0 mm (ii) Maximum deviation from a 20 m straight line: 10 mm b) Vertical deviation from a 3,0 m straight edge (i) At the edge beams: 3,0 mm (ii) Elsewhere: 3,0 mm c) Differences in the surface levels of adjacent units: 2,0 mm The profile index will be determined using a California type profilograph furnished and operated by the Engineer in the presence of the Contractor. The profilograph shall be moved longitudinally along the pavement at a speed no greater than 5 kph and shall record the surface profile at full scale vertically. The results of the profilograph test will be evaluated as described in the metricated version of Test No. Calif. 526-D. The Contractor shall furnish paving equipment and employ methods that produce a riding surface having a profile index of 300 mm per kilometer or less for category "A" Roads and 500 mm per kilometer or less for Category "B" Roads. The profile measurements will start 10 m and will terminate 20 m from each bridge approach pavement or existing pavement that is joined by the new pavement in the direction of placement. Two pavement profiles will be taken of each day's production and the Profile Index shall be defined as the average of the two profiles. The position the profiles are taken will be either on the centre line of each planned traffic lane, if two traffic lanes are paved, or in the wheel paths of the traffic lane (i.e. 1 m from each edge) if only one traffic lane is included in the paved width. A daily average profile index shall be determined for each day's paving and a profile index of each day's production shall be established as soon as possible. A day's paving is defined as a minimum of 0,1 km of pavement placed in a day. If less than 0,1 km is paved, the day's production will be grouped with the next day's production. Rectification: The full depth of the layer shall be removed and replaced with fresh material laid and compacted to specification. Where the surface level is too high or too low the area rectified shall be not less than one lane wide and at least 15 m long for wearing course. Where the number of surface irregularities exceeds the specified limits the area to be rectified shall be 100 m long and not less than one lane wide.
	Tenderers are to further take note of the Technical Specification for Asphalt Contained at the end of this section
PSC6.3	Polymer film sheeting
	0,25mm thick Polymer film sheeting or similar approved material below paving blocks.

	The material shall to be used shall be 250 micron polyurethane membrane and shall comply with the specifications as embedded under SANS 952 Part 2. The unit of measurement shall be in square meters. The rate provided shall cover the cost of the procurement of all necessary material, equipment, tools, plant, loading, transporting, handling and installing to Engineers specification and satisfaction. The rate shall also cover all overlaps, cuts, spoils and disposing of any surplus debris, etc.								
PS C9.1	ASPHALT LAYERS								
PS A9.1.5	Asphalt reinforcing								
	For this project as Type 2 Paving Grid with meeting the following specifications as per latest version of shall be utilized for the reinforcement of the asphalts surface: - Mass: 370 g/m² - <u>Tensile Strength:</u> a) Length: 100 kN/m b) Max. Elongation at Break (length): < 5% c) Width: 100 kN/m d) Max. Elongation at Break (width): <5% - Min. Melting Point: > 218 °C - <u>Grab Strength:</u> a) Warp: 1 300 N b) Weft: 750 N - <u>Dimensions:</u> a) Grid Size: 12.5mm x 12.5mm b) Roll Length: 100m c) Roll width: 1.5m The Paving grid shall fully comply with the requirements of SABITA Technical Guideline TG3: Asphalt Reinforcement for Road Construction, 3rd Edition – January 2022.								
PS C11.7	ROAD MARKINGS AND ROAD STUDS								
PS C11.7.1	Road Markings								
	The plastic road marking material shall also comply with the requirements of Specification BS.3262, 1987 Part 3. A) The material shall consist of a light-coloured aggregate, pigment and extender, bound together with a thermoplastic resin, plasticised as necessary. The approximate composition of the material as laid is dependent on the appropriate specification, but for example shall be: <table style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Aggregate</td><td>40 parts</td></tr> <tr> <td>Solid Glass Beads</td><td>20 parts</td></tr> <tr> <td>Pigment and Extender</td><td>20 parts</td></tr> <tr> <td>Binder</td><td>20 parts</td></tr> </tbody> </table> The proportioning of the various ingredients shall be such that the material, when in a molten state, can be sprayed readily onto the road surface to give an even line of good definition. B) Aggregate:	Aggregate	40 parts	Solid Glass Beads	20 parts	Pigment and Extender	20 parts	Binder	20 parts
Aggregate	40 parts								
Solid Glass Beads	20 parts								
Pigment and Extender	20 parts								
Binder	20 parts								

	The aggregate shall consist of white silica sand, crushed calcite calcined flint, quartz, or other approved aggregate. C) Reflectorisation: The solid glass beads incorporated in the mixture shall comply with the Class A category of BS 6088 (1981) that is: <table> <tr> <td>Sieve</td><td>% Retained</td></tr> <tr> <td>0,18 mm</td><td>0 - 3</td></tr> <tr> <td>0,850 mm</td><td>5 - 20</td></tr> <tr> <td>0,425 mm</td><td>65 - 95</td></tr> <tr> <td>Below 0,425 mm</td><td>0 - 10</td></tr> </table> Minimum of spherical beads by number 70% D) Luminance: The luminance factor of white SPRAYPLASTIC shall be not less than 70 E) Flow resistance: The percentage decrease in the height of the cone of SPRAYPLASTIC shall not be more than 25 after testing for 48 hours at 23 C (temperate grade) or 40 C (semi-tropical or tropical grades). F) Low Temperature Impact Resistance: SPRAYPLASTIC shall pass the impact test when tested at -10 C (temperate grade) or -1 C (semi-tropical or tropical grades). G) Abrasion resistance: The abrasive wear of SPRAYPLASTIC shall typically be less than 0,5 g per 100 revolutions. Items have been included in the Bill of Quantities for the provision of temporary road marking using P.V.A. paint.	Sieve	% Retained	0,18 mm	0 - 3	0,850 mm	5 - 20	0,425 mm	65 - 95	Below 0,425 mm	0 - 10
Sieve	% Retained										
0,18 mm	0 - 3										
0,850 mm	5 - 20										
0,425 mm	65 - 95										
Below 0,425 mm	0 - 10										
	The Contractor shall upon receiving the instruction and the related specification, provide three competitive quotations for review and approval by the Engineers for the supply and installation of road studs.										
PS C11.7.7.12	Handling cost, profit and other charges in respect of item PS C11.7.11										
	The percentage rate (maximum 10%) shall be deemed to cover all Contractor's handling costs and profits in relation to the work done.										
PS C11.7.12	Provision of Traffic calming measures										
(a)	Trapezoidal Speed humps, Rumble bars etc: Complete with markings and signs as per drawings										
	The Contractor shall upon receiving the instruction and the related specification, provide three competitive quotations for review and approval by the Engineers for the supply and installation of relevant traffic calming measures.										
(b)											
	The percentage rate (maximum 10%) shall be deemed to cover all Contractor's handling costs and profits in relation to the work done.										
C12.3	GROUND IMPROVEMENT										

PS C12.3.20	Dump rock: The dumprock shall consist of fresh to slightly weathered upgraded waste rock from mining activities, blasting or rock excavation. Shales, slates or other laminated mudrocks shall not be accepted. Dumprock shall have a minimum size not more than two-thirds of the compacted thickness of the layer. The rock shall otherwise be upgraded but shall contain less than 10% passing the 37,5 mm sieve when spread on site. Dumprock shall have a minimum 10% FACT value of 100 kN when dry and 40 kN when tested drained after 24 hours soaking. Dumprock shall be spread and levelled such that when compacted it is at the specified thickness and levels. When the correct road profile has been attained the dumprock layer shall be rolled 5 passes of a 10/12 ton static three wheel steel roller or equivalent vibrating roller. Dry, fine material (13,2 mm down) with a Plastic Index of between 0 and 7 shall then be applied in a blanket over the full width of the layer. With hand labour following the roller, the fine material shall be rolled and broomed into the voids of the stone. This procedure shall be repeated until the stone layer will accept no further fines. Compaction of the layer shall continue until movement of the material under the compactor becomes negligible or for a maximum of 10 passes of the roller whichever occurs first. The completed dumprock layer shall be measured in cubic metre (m³). The rate shall cover the supply, loading, transporting, dumping, spreading of all materials and all processing of the layer and proof rolling, all as detailed.																																																																																																																							
	Geofabrics: The synthetic fibres of a geotextile blanket shall consist of at least 100% by mass of polypropylene, polyethylene or a polyester polymer and shall contain such additives as are necessary to render the filaments resistant to the effects of ultra-violet radiation in accordance with the following requirement: The geotextile shall retain 80% of its specified strength after an effective exposure period of 1500 hours to direct sunlight. The grade of geotextile shall conform to Table 1 of SABS 0221-1988: TABLE 1 - GRADES OF GEOTEXTILES <table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr><tr><td rowspan="2">Property</td><td colspan="10">Grades</td></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr><tr><td rowspan="2">Thickness, mm</td><td colspan="10">Minimum value</td></tr><tr><td colspan="10">as specified by manufacturer</td></tr><tr><td>Mass per unit area, g/m²</td><td>100</td><td>100</td><td>140</td><td>140</td><td>200</td><td>200</td><td>240</td><td>240</td><td>300</td><td>300</td></tr><tr><td>Penetration load, kN</td><td>1,0</td><td>1,0</td><td>1,5</td><td>1,5</td><td>2,5</td><td>2,5</td><td>3,0</td><td>3,0</td><td>4,0</td><td>5,0</td></tr><tr><td>Tensile strength, kN/m</td><td>6</td><td>6</td><td>10</td><td>10</td><td>13</td><td>13</td><td>18</td><td>18</td><td>25</td><td>30</td></tr><tr><td>Permeability, 1/s.m²</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td> High flow</td><td>200</td><td>-</td><td>170</td><td>-</td><td>130</td><td>-</td><td>80</td><td>-</td><td>40</td><td>-</td></tr><tr><td> Low flow</td><td>-</td><td>25</td><td>-</td><td>20</td><td>-</td><td>15</td><td>-</td><td>10</td><td>-</td><td>5</td></tr></table>	1	2	3	4	5	6	7	8	9	10	11	Property	Grades										1	2	3	4	5	6	7	8	9	10	Thickness, mm	Minimum value										as specified by manufacturer										Mass per unit area, g/m²	100	100	140	140	200	200	240	240	300	300	Penetration load, kN	1,0	1,0	1,5	1,5	2,5	2,5	3,0	3,0	4,0	5,0	Tensile strength, kN/m	6	6	10	10	13	13	18	18	25	30	Permeability, 1/s.m²											High flow	200	-	170	-	130	-	80	-	40	-	Low flow	-	25	-	20	-	15	-	10	-	5
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PS C12.11.1	Geosynthetics																																																																																																																							

The Engineer's approval of the make and grade of the geosynthetic shall be obtained by the Contractor before any geosynthetic is ordered or used on the works.

The instruction from the Employer's Agent to use a certain geosynthetic shall require the Contractor to supply and install that geosynthetic or an approved equivalent by the Employer's Agent.

The unit of measurement shall be the square metre (m²). The rate shall include for the supply of the material, laying, joining, cutting and waste.

Refer to COTO A12.11 for all geosynthetics

Geotextile:

The synthetic fibres of a geotextile blanket shall consist of at least 100% by mass of polypropylene, polyethylene or a polyester polymer and shall contain such additives as are necessary to render the filaments resistant to the effects of ultraviolet radiation in accordance with the following requirement :

The geotextile shall retain 80% of its specified strength after an effective exposure period of 1500 hours to direct sunlight.

TABLE 1 - GRADES OF GEOTEXTILES

1	2	3	4	5	6	7	8	9	10	11
Property	Grades									
	1	2	3	4	5	6	7	8	9	10
Thickness, mm	Minimum value									
	as specified by manufacturer									
Mass per unit area, g/m ²	100	100	140	140	200	200	240	240	300	300
Penetration load, kN	1,0	1,0	1,5	1,5	2,5	2,5	3,0	3,0	4,0	5,0
Tensile strength, kN/m	6	6	10	10	13	13	18	18	25	30
Permeability, 1/s.m ²										
High flow	200	-	170	-	130	-	80	-	40	-
Low flow	-	25	-	20	-	15	-	10	-	5

Unit of Measure: Square Metres (m²)

**PS
C12.11.2** **Geosynthetics: Embankment protection**

The unit of measurement shall be the square metre (m²). The rate shall include for the supply of the material, laying, joining, cutting and waste.

C3.4.2 ADDITIONAL SPECIFICATIONS

C3.4.2.1 DESIGN, SUPPLY, DELIVERY AND INSTALLATION OF SOLAR STREET LIGHTING

See Annexure

C3.5: MANAGEMENT**C3.5 MANAGEMENT****C3.5.1 MANAGEMENT OF THE WORKS****C3.5.1.1 Applicable SANS and SABS Standards**

The COTO (2020 Edition) Standardized Specifications listed in C3.4.1.1 are applicable.

C3.5.1.2 Particular/Generic Specifications

Not applicable.

C3.5.1.3 Methods and Procedures**(a) Maintenance of access and streets**

The operation of construction vehicles on existing roads or streets, or streets that have been completed to the level of subbase, base or surfaced treatment, shall be limited to the traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof. Hauling is strictly forbidden on sections of road or streets that have been completed as described above. The Contractor shall make use of a temporary haul road, or where not practically possible, program his work in such a manner that the haulage materials shall be restricted to that required for the particular section of street. No additional payment shall be made for the use of temporary haul roads and all relevant costs shall be deemed covered by the appropriate rates.

No additional payment will be made for the construction of temporary access roads to the construction site, borrow areas or the spoil sites, except for payment made under payment item C4.1.3 in the Bill of Quantities.

Should the Contractor make use of existing roads or streets for haulage, he shall be held responsible to clear the road or street of any spillage caused by his activities within one (1) day after such spillage occurred. No additional payment will be made for the cleaning of the spillage.

(b) Blasting operation

All blasting shall be carried out by a competent, registered blaster. The blaster shall furnish to the Engineer copies of all the permits required to purchase, transport, use and dispose of unused blasting material. The Contractor shall inform the commander of the local SAPS at least 1 day prior to the date and time blasting is about to take place.

No blasting operations shall take place on weekends or holidays or weekdays after 17h00.

The Contractor shall ensure that sufficient suitable material, to the satisfaction of the blaster, is available and in place before the blast is initiated.

(c) Normal working hours

Normal working hours shall be from 07h00 until 17h00 on weekdays from Monday to Friday. It shall be from 07h00 until 13h00 on Saturdays.

Work on other days will only be allowed after written approval has been granted by the Engineer.

(d) Interference with municipal staff and operations

The Contractor shall ensure that none of his staff interfere in any way with any municipal staff member or their functions.

Any person ignoring this shall be removed permanently from site, all at the expense of the Contractor

(e) Access for other contractors

The Contractor shall provide reasonable access to other Contractors carrying out work on the site from time to time, as and when such access is required. The Contractor is entitled to request reasonable notification of at least 24 hours before access by others is required.

The contractual responsibilities of the Contractor shall remain in full force in spite of the other Contractors having access to the site.

(f) Giving notice of work to be covered up

The Contractor shall give the Engineer at least 24 hours' notice prior to a request for examination of materials or work to be covered up. This request must be made in the request book on site.

Should such a request be made and upon inspection the Engineer found that the works or materials are not yet ready for inspection, the Contractor shall reimburse the Engineer within 30 days of invoice for all expenses incurred as a result.

(g) Sequence of the works

The Contractor shall execute the Works in accordance with the approved programme.

C3.5.1.4 Quality plans and control (Testing)

Refer to Section C3.4.2.5(b).

C3.5.1.5 Environmental Management Plan (EMP)**(a) Demarcation of the site**

For the purpose of the EMP, the site shall be demarcated into two distinct areas, viz.;

- (i) The construction camp comprising all buildings, hostels, offices, lay down yards, vehicle wash areas, fuel and material storage area, batching areas and other infrastructure that is required for the running of the job.
- (ii) The working area in which construction activities are permitted to take place. No infrastructure, permanent lay down or storage areas shall be established in this working area unless specified in the project specification or prior approval is obtained from the Engineer.

(b) Construction camp

The Contractor shall provide the Engineer with a plan showing the positions of all buildings, yards, vehicle wash areas, batching areas and other infrastructure for approval by the Engineer at least ten (10) days prior to the commencement date.

(c) Fencing of site

If a temporary fence is required, the Contractor shall erect and maintain such a fence (demarcating the boundary of the working area, construction camp and access roads) to the satisfaction of the Engineer.

This fence shall be erected before the commencement of any other work on site. The fence shall be removed after completion of the project and the site reinstated to its original state.

(d) Workshops

All workshops shall be located inside the demarcated construction camp area as approved by the Engineer prior to establishment. The workshop shall have a smooth impermeable concrete floor sloped to one side where oil is trapped in an oil trap or sump to contain any spillages of substances such as oil.

Waste material shall be disposed of in accordance with the national, regional and local by-laws regulations and by-laws. The waste shall be regularly removed and disposed of at an approved site.

(e) Eating areas

The Contractor's employees shall eat in a designated eating area indicated on the drawing approved by the Engineer. The Contractor shall provide adequate shade and provide scavenger proof and waterproof refuse bins. Cooking will only take place in this area on well-maintained gas cookers with fire extinguishers present. Open fires other than the gas cookers shall not be allowed.

(f) Watchmen

The Contractor shall have a watchman present on site during non-working hours and on holidays to ensure the safety of plant and materials on site.

(g) Ablution facilities

The exact location of toilets shall be approved by the Engineer. The Contractor shall provide the toilets and maintain and service it on a daily basis. The toilets shall be kept clean. Regular inspections shall be conducted by the Engineer. Burial of waste on site is strictly forbidden. Leaking or broken toilets shall be removed and replaced immediately by the Contractor.

(h) Solid waste

"Solid waste" refers to construction debris, chemical waste, tins, cans, paper, wrappers, excess concrete, waste timber, etc.

The Contractor shall establish a waste control and removal system. He shall submit a method statement to the Engineer for approval prior to commencement.

Appropriate solid waste containers shall be provided for the storage of waste. The containers shall be water proof. The waste shall be removed on a regular basis to prevent the accumulation of waste on site and disposed of at an approved waste site.

(i) Wastewater

Water shall be used sparingly on site. Where possible, wastewater shall be recycled. A wastewater management plan shall be submitted to the Engineer for approval 10 days prior to the commencement date.

The management plan shall detail the expected extent of the contamination of each wastewater stream and how the Contractor plans to deal with it.

Wastewater shall be prevented from flowing into any stream.

(j) Fuel storage area

Fuel shall be stored on site in a depot at a location as agreed with the Engineer. The Contractor shall ensure that liquid fuels are stored in tanks with lids. The tanks shall be placed on a sloped smooth concrete surface with an oil trap on the lower end to collect any spillage.

Fuel shall be kept under lock at all times.

(k) Concrete batching area

Cement and concrete is hazardous to the environment due to the high pH of the material and the chemicals it contains. The Contractor shall furnish to the Engineer for approval a method statement for the mixing of concrete. Concrete shall not be mixed directly on the ground. Care must be taken to ensure that wastewater and contaminated material is collected and disposed of correctly.

(l) Equipment maintenance and storage

All equipment and vehicles shall be kept in good working order and serviced regularly. Leaking equipment shall be repaired immediately or removed from site. Where possible, maintenance and service shall take place only in the workshop. Permission must be obtained from the Engineer if the aforementioned cannot be adhered to.

The Contractor shall demarcate an area in which the equipment and vehicles may be stored. The location shall be approved by the Engineer.

(m) Materials handling, use and storage

The Contractor is responsible to ensure that all material suppliers are aware of the EMP's restrictions and conditions. The Contractor shall be held responsible should deliveries not comply with the EMP requirements.

The Contractor shall comply with all relevant national, regional and local legislation with regard to the transport, use and disposal of hazardous material.

The Contractor shall furnish to the Engineer a list of all hazardous materials to be used on site, together with the handling, storage and disposal procedures of the materials. This information shall be available to all personnel on site.

The location of the hazardous material store shall be within the demarcated construction camp area. The location shall be approved by the Engineer.

Where possible, the Contractor shall ensure that the refueling of vehicles takes place only at the fuel storage area in the construction camp. If this is not possible, the Contractor shall obtain permission from the Engineer

to refuel at any other place. Contaminated material and wastewater at the refueling area shall be contained and disposed of correctly.

(n) Emergency procedures

The Contractor shall ensure that emergency procedures for the following situations are submitted for approval to the Engineer;

Fire – the Contractor shall inform the relevant authority immediately as soon as a fire starts. The Contractor shall ensure that his staff and subcontractors are fully aware of the procedures to be followed in the event of a fire.

Spillages – the Contractor shall ensure that his staff and subcontractors are fully aware of the procedures to be followed in the event of a spillage. The Engineer must be informed immediately about a spill. The Contractor shall ensure that the necessary materials and equipment is on site to deal with spills and leaks. The cleanup of spills and leaks shall be for the account of the Contractor.

(o) Care of surrounding areas

The Contractor shall ensure that no contamination of or damage to the surrounding areas or watercourses shall occur as a result of any of his activities during construction.

C3.5.1.6 Planning and programming

The programme to be furnished by the Contractor to the Engineer for approval shall be in the form of a Gantt chart. The critical path shall be indicated in red.

C3.5.1.7 Other Contractors on site

No other road construction contractors will be on site during the implementation of the project.

C3.5.1.8 Recording of weather

The Contractor shall record the weather conditions on a daily basis in the site diary. Rainfall figures and strong wind which could delay the Works shall be noted and recorded.

C3.5.1.9 Format of communications

All communication regarding the Contract shall be channelled through the Engineer or his representative.

C3.5.1.10 Planning and programming

Management meeting shall be held monthly on site for the duration of the project on dates to be agreed upon.

C3.5.1.11 Daily records

Daily records of plant, personnel, materials, etc., shall be kept daily by the Contractor and noted in the site diary to be supplied by the Contractor before commencement date of the project.

C3.6: HEALTH AND SAFETY**C3.6 HEALTH AND SAFETY****C3.6.1 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES**

Before starting work on site, the Contractor shall present to the Engineer his Health and Safety Plan which includes the COVID-19 plan for approval. He shall also appoint a health and Safety Officer in writing and give a copy of the letter of appointment to the Engineer.

The Health and Safety Specification is attached as Appendix B and must be referred to when compiling the Health and Safety Plan.

(a) Construction Regulations, 2003

The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2003 (the regulations) as promulgated in Government Gazette No 25207 and Regulation Gazette No 7721 of 18 July 2003. 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 2003.

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.

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 site is accessible to the general public. The Contractor shall ensure that all personnel entering the construction site is fully informed about the dangers, dos and don'ts on the site. The Contractor shall ensure that non-construction personnel are protected within the guidelines of the OH&S Regulations.

C3.6.3 BARRICADES AND LIGHTING

All excavations, into which a person may fall, shall be securely barricaded at all times in accordance with the requirements of the applicable OH&S Regulations.

C3.6.4 TRAFFIC CONTROL ON ROADS

The Safety Officer shall take full responsibility for the traffic control in and around the site. The personnel on site shall be fully informed and trained by the Safety Officer regarding the construction traffic and general traffic control.

C3.6.5 MEASURES AGAINST DISEASE AND EPIDEMICS

Necessary measures must be adopted and implement occupational health and safety measures to reduce and eliminate the escalations of infections in workplaces against disease, epidemics and pandemics on site as and when directed by the Department of Labour.

C3.6.6 AIDS AWARENESS

All construction personnel shall be given an Aids Awareness briefing session by the Safety Officer.

PART C4 SITE INFORMATION**PART C4: SITE INFORMATION****C4.1 SITE INFORMATION****GENERAL**

This section describes the site at the time of tender to enable the tenderer to price his tender and to decide upon his method of working and programming and risks.

CONTENTS

- SI1 Site location**
- SI2 Climatic Condition**
- SI3 Geotechnical Investigation**

1. SITE DESCRIPTION**SI 1 Site Location**

The Road upgrades for the D2296 start from Tekwane South and terminate at the intersection of D2296 / N4 road, towards Kanyamazane, within the bounds of the City of Mbombela Local Municipality in the Mpumalanga Province.

The GPS coordinates is as follows:

Table 2: Project Location

D2296		
Length:		6km
Start	Latitude	25°28'31.65"S
	Longitude	31°9'2.19"E
End	Latitude	25°29'57.67"S
	Longitude	31° 2'16.25"E

The proposed site locality map is shown in Figure 1 below.

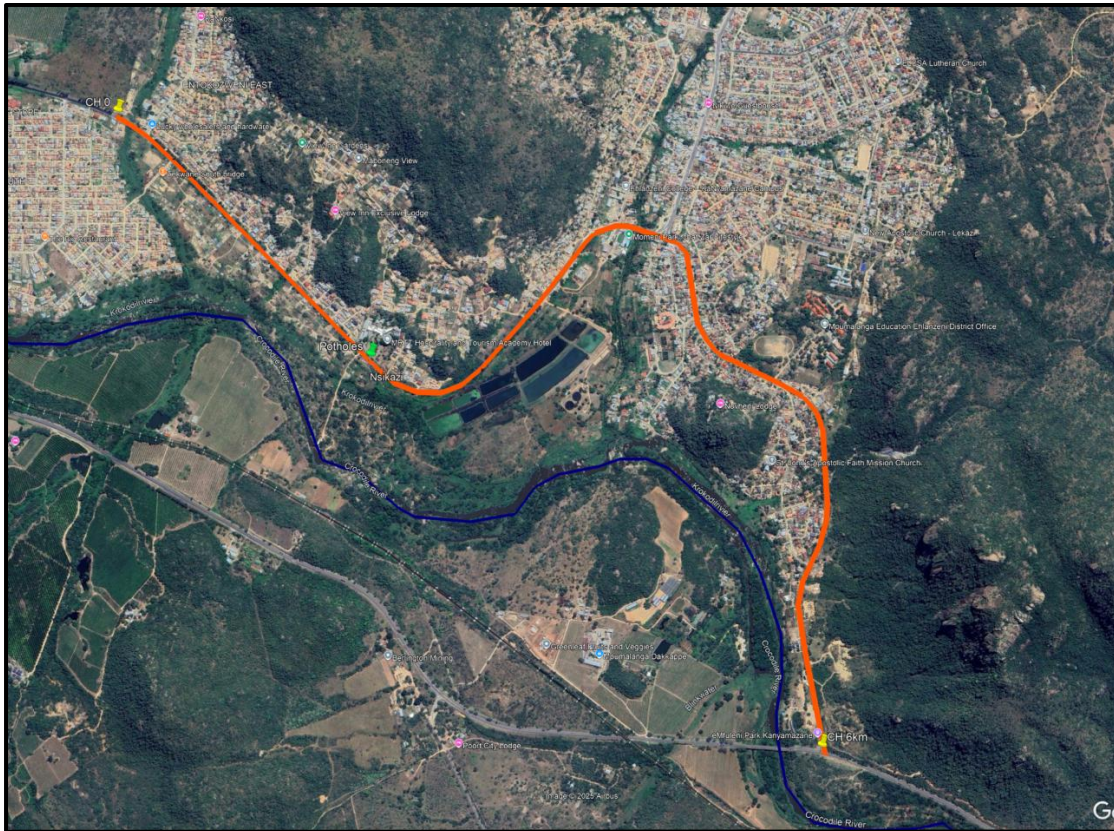


Figure 1: Site Locality Map

SI 2 Climatic Condition

The climate in Mbombela is warm and temperate. In winter, there is more rainfall in the Mbombela area with an average annual rainfall of approximately 953mm per year, most of which occurs in heavy isolated falls between October and March. The greatest amount of rainfall occurs in January with an average of 168.12mm. The average low temperatures 14.7 degrees Celsius (°C) and the average high temperatures is 28.16 degrees Celsius (°C). Weinert developed an N-value which is the ratio of the annual evaporation versus annual precipitation of a region and has been defined for Southern Africa region (Weinert, 1980). Climatic regime of the present and recent past plays an important role in the soil profile below the earth's surface (A.B.A Brink). The N-values are therefore used to characterise mode of weathering of the rocks within the subcontinent.

Weinert demonstrated that chemical decomposition is the predominant mode of rock weathering in areas where climatic "N-value" is less than 2. In areas where climatic N-value is between 2 and 5, disintegration is the predominant form of weathering, although some chemical decomposition of the primary rock minerals still takes place. Where the climatic N-value is greater than 5, secondary minerals do not develop to an appreciable extent and all weathering takes place by mechanical disintegration of the rock. Disintegration is the predominant form of weathering, although some chemical decomposition of the primary rock minerals still takes place.

SI 3 Geotechnical Investigation

The geotechnical Investigation Report is available on request.

ANNEXURE A: OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS CONTENTS

PARTICULAR SPECIFICATIONS.....	A-1
AGREEMENT OCCUPATIONAL HEALTH AND SAFETY	A-10
CONTRACTOR'S HEALTH AND SAFETY DECLARATION	A-13
PRO FORMA NOTIFICATION	A-1

PARTICULAR SPECIFICATIONS

SECTION OHS: OHSA 1993: HEALTH AND SAFETY SPECIFICATION

OHS 1 SCOPE

This specification covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy environment for all workers, employees and subcontractors 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 2014, and all other safety codes and specifications referred to in the said Construction Regulations **and the COVID-19 Occupational Health and Safety Measures in Workplaces, COVID-19(C19 OHS), 2020.**

In terms of the OHSA Agreement in Section (C1.4) of the Contract 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 OHSA 1993, the Construction Regulations 2014 and **COVID-19(C19 OHS), 2020.**

This safety specification and the Contractor's own Safety Plan, the Construction Regulations 2014 as well as **COVID-19(C19 OHS), 2020**, shall be displayed on site or made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

The following are possible risks associated with this project:

- Please insert the risks associated with the project here

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

OHS 2 DEFINITIONS

For the purpose of this contract the following shall apply:

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 2014. **"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 OHSA 1993, be the mandatory, 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).

OHS 3 TENDERS

The Contractor shall submit the following with his tender:

- (a) a documented Health and Safety Plan as stipulated in Regulation 7 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2014 and **COVID-19(C19 OHS), 2020** and will be subject to approval by the Employer;
- (b) 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 2014;
- (c) a declaration to the effect that he made provision in his tender for the cost of the health and safety measures envisaged in the Construction Regulations.
- (d) Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor will not be able to carry out the work under the contract safely in accordance with the Construction Regulations.

OHS 4 NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

After award of the contract, but before commencement of construction 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 3,0m or more;
- (b) the use of explosives;
- (c) construction work that will exceed 30 days or 300 person-days;
- (e) excavation work deeper than 1,0m; or
- (f) working at a height greater than 3,0m above ground or landings.

The notification must be done in the form of the pro forma included under Section T2 (Forms to be Completed by Tenderer) of the tender document.

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

OHS 5 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 Regulation 9 of the Construction Regulations 2014).

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

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

OHS 6 APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

6.1 Health and Safety plan

The Contractor shall appoint his employees and any subcontractors 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 subcontractors and employees are committed to the implementation of his Safety Plan.

6.2 Health and safety induction training

The Contractor shall ensure that all employees under his control, including subcontractors 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 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.

OHS 7 APPOINTMENT OF SAFETY PERSONNEL

7.1 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.

7.2 Construction safety officer

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** if so decided by the client. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision shall be made by the Contractor in his rates, to cover the cost of this dedicated construction safety officer appointed after award of the contract.

7.3 Health and safety representatives

In terms of **Section 17 and 18 of the Act (OHSA 1993)** the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a **health and safety representative** whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 100 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to

inspect the workplace, plant, machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

7.4 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 recommendations and reports made by the committee.

7.5 Competent persons

In accordance with the Construction Regulations the Contractor has to appoint in writing **competent persons** responsible for supervising construction work on each of the following work situations that may be expected on the site of the works.

- (a) Risk assessment and induction training as described in Regulation 9 of the Construction Regulations;
- (b) Fall protection as described in Regulation 10;
- (c) Structures described in Regulation 11;
- (d) Temporary works described in Regulation 12;
- (e) Excavation described in Regulation 13;
- (f) Demolition work described in Regulation 14;
- (g) Tunneling as described in Regulation 15;
- (h) Scaffolding as described in Regulation 16;
- (i) Suspended platforms as described in Regulation 17;
- (j) Rope Access Work as described in Regulation 18;
- (k) Material hoists as described in Regulation 19;
- (l) Bulk mixing plant as described in Regulation 20;
- (m) Explosive actuated fastening device as described in Regulation 21;
- (n) Cranes as described in Regulation 22;
- (o) Construction vehicle and mobile as described in Regulation 23;
- (p) Electrical installations and machinery of construction sites as described in Regulation 24;
- (q) Use and temporary storage of flammable liquids on construction sites as described in Regulation 25;
- (r) Water environments as described in Regulation 26;
- (s) Housekeeping and general safeguarding on construction sites as described in Regulation 27;
- (t) Stacking and storage on construction sites as described in Regulation 28;

- (u) Fire precautions on construction sites as described in Regulation 29, and
- (s) Construction employees' facilities as described in Regulation 30.

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.

OHS 8 RECORDS AND REGISTERS

In accordance with the Construction Regulations the Contractor is bound to keep records and registers related to health and safety on site for periodic inspection by inspectors, the Engineer, the Employer, trade union officials and subcontractors and employees. The following records and registers must be kept on site and shall be available for inspection at all times.

- (a) A copy of the OHSA 1993 Construction Regulations 2014;
- (b) A copy of this Health and Safety Specification;
- (c) A copy of the Contractor's Health and Safety Plan (Regulation 7);
- (d) A copy of the Notification of Construction Work (Regulation 4);
- (e) A health and safety file in terms of Regulation 5(1)(b) with inputs by the Construction Safety Officer (Regulation 7(1));
- (f) A copy of the risk assessment described in Regulation 9;
- (g) A full protection plan and the corresponding records of evaluation and training of employees working from elevated positions as described in Regulation 10;
- (h) Drawings pertaining to the design of structures (Regulation 11(1)(c)) and formwork and support work structures (Regulation 12) must be kept on site;
- (i) Pronouncement of the safety of excavations must be recorded in a register to be kept on site (Regulation 13);
- (j) A copy of the certificate of the system design for suspended platforms (Regulation 17(2)(b));
- (k) A notice must be affixed around the base towers of material hoists to indicate the maximum mass load, which may be carried at any one time by material hoists (Regulation 19(5));
- (l) Maintenance records of material hoists and inspection results must be kept in a record book to be kept on site (Regulation 19(8));
- (m) A record of any repairs to or maintenance of a batch plant must be kept on site (Regulations 20(8));
- (n) A warning notice must be displayed in a conspicuous manner when and wherever an explosive powered tool is used (Regulation 19(2));
- (o) A register for recording of findings by the competent person appointed to inspect construction vehicles and mobile plant (Regulation 23(1)(k)).

OHS 9 CONTRACTORS RESPONSIBILITIES

For this contract the Contractor will be the mandatory of the Employer (Client), as defined

in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2014.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) to confirm his status as mandatory (employer) for the contract under consideration. The Contractor's duties and responsibilities are clearly set out in the Construction Regulations 2014 and are not repeated in detail but some important aspects are highlighted hereafter, without relieving the Contractor of any of his duties and responsibilities in terms of the Construction Regulations.

(a) Contractor's position in relation to the Employer (Client) (Regulation 5)

In accordance with Section 4 of the Regulations, the Contractor shall liaise closely with the Employer or the Engineer on behalf of the Employer, to ensure that all requirements of the Act and the Regulations are met and complied with.

(b) The Principal Contractor and Contractor (Regulation 7)

The Contractor is in terms of the definition in Regulation 1 the equivalent of Principle Contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 7.

Any subcontractors employed by the Contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent subcontractor shall however provide and demonstrate to the Contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the subcontractor shall undertake in writing that he will comply with the Contractor's safety plan, the health and safety specifications of the Employer and the Construction Regulations 2014.

(c) Supervision of construction work (Regulation 8)

The Contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 7 and as set out in OHS 7 above. Appointment of those personnel and employees does not relieve the Contractor from any of the obligations under Regulation 7.

(d) Risk assessment (Regulation 9)

The Contractor shall have the risk assessment made as set out in paragraph 7 above before commencement of the work and it must be available on site for inspection at all times. The Contractor shall consult with the health and safety committee or health and safety representative(s) etc. on a regular basis to ensure that all employees, including subcontractors under his control, are informed and trained by a competent person regarding health hazards and related work procedures.

No subcontractor, employee or visitor shall be allowed to enter the site of works without prior health and safety induction training, all as specified in Regulation 7.

(e) Fall protection (Regulation 10)

Fall protection, if applicable to this contract shall comply in all respects with Regulation 8 of the Construction Regulations.

(f) Structures (Regulation 11)

The Contractor will be liable for all claims arising from collapse or failure of structures if he failed to comply with all the specifications, project specifications and drawings related to the structures, unless it can be proved that such collapse or failure can be attributed to faulty design or insufficient design standards on which the specifications and the drawings are based.

In addition, the Contractor shall comply with all aspects of Regulation 11 of the Construction Regulations.

(g) Temporary works (Regulation 12)

The Contractor will be responsible for the adequate design of all formwork and support structures by a competent person.

All drawings pertaining to formwork shall be kept on site and all equipment and materials used in formwork, shall be carefully examined and checked for suitability by a competent person.

The provisions of Regulation 12 of the Construction Regulations shall be followed in every detail.

(h) Excavation work (Regulation 13)

It is essential that the Contractor shall follow the instructions and precautions in the Standard Specifications and Project Specifications as well as the provisions of the Construction Regulations to the letter as unsafe excavations can be a major hazard on any construction site. The Contractor shall therefore ensure that all excavation work is carried out under the supervision of a competent person, that inspections are carried out by a Professional Engineer or Technologist, and that all work is done in such a manner that no hazards are created by unsafe excavations and working conditions.

Supervision by a competent person will not relieve the Contractor from any of his duties and responsibilities under Regulation 13 of the Construction Regulations.

(i) Demolition work (Regulation 14)

Whenever demolition work is included in a contract, the Contractor shall comply with all the requirements of Regulation 14 of the Construction Regulations. The fact that a competent person has to be appointed by the Contractor does not relieve the Contractor from any of his responsibilities in respect of safety of demolition work.

(j) Tunneling (Regulation 15)

The Contractor shall comply with Regulation 15 wherever tunneling of any kind is involved.

(k) Scaffolding (Regulation 16)

The Contractor shall ensure that all the provisions of Regulation 16 of the Construction Regulations are complied with. [Note: Reference in the Regulations to "Section 44 of the Act" should read "Section 43 of the Act"].

(l) Suspended platforms (Regulation 17)

Wherever suspended platforms will be necessary on any contract, the Contractor shall ensure that copies of the system design issued by a Professional Engineer are

submitted to the Engineer for inspection and approval. The Contractor shall appoint competent persons as supervisors and competent scaffold erectors, operators and inspectors and ensure that all work related to suspended platforms are done in accordance with Regulation 17 of the Construction Regulations.

(m) Rope Access Work (Regulation 18)

Where rope access work is required on the construction site, the Contractor shall comply with Regulation 18.

(n) Material Hoists (Regulation 19)

Wherever applicable, the Contractor shall comply with the provisions of Regulation 19 to the letter.

(o) Batch plants (Regulation 20)

Wherever applicable, the Contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a batch plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation 20.

The Contractor shall ensure that the General Safety Regulations (2003), the Driven Machinery Regulations (Government Notice R295 of 26/2/1988) and the Electrical Installation Regulations (Government Notice R2271 of 11/10/1995) are adhered to by all involved.

In terms of the Regulations, records of repairs and maintenance shall be kept on site.

(p) Explosive powered tools (Regulation 21)

The Contractor shall ensure that, wherever explosive-powered tools are required to be used, all safety provisions of Regulation 21 are complied with.

It is especially important that warning notices are displayed and that the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

(q) Cranes (Regulation 22)

Wherever the use of tower cranes becomes necessary, the provisions of Regulation 20 shall be complied with.

(r) Construction vehicles and mobile plant (Regulation 23)

The Contractor shall ensure that all construction vehicles and plant are in good working condition and safe for use, and that they are used in accordance with their design and intended use. The vehicles and plant shall only be operated by workers or operators who have received appropriate training, all in accordance with all the requirements of Regulation 23.

All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and the findings must be recorded in a register to be kept on site.

Ele The Contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the Contractor shall take adequate steps to ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus

under, over or on the site.

All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 24.

- (s) Use of temporary storage of flammable liquids on construction sites (Regulation 25)

The Contractor shall comply with the provisions of the General Safety Regulations (2003) and all the provisions of Regulation 25 of the Construction Regulations to ensure a safe and hazard-free environment to all workers and other persons on site.

- (t) Water environments (Regulation 26)

Where construction work is done over or in close proximity to water, the provisions of Regulation 26 shall apply.

- (u) Housekeeping on Construction sites (Regulation 27)

Housekeeping on all construction sites shall be in accordance with the provisions of the environment Regulations for workplaces (Government Notice R2281 of 16 October 1987) and all the provisions of Regulation 27 of the Construction Regulations.

- (v) Stacking and storage on construction sites (Regulation 28)

The provisions for the stacking of articles contained in the General Safety Regulations (2003) as well as all the provisions Regulation 28 of the Construction Regulations shall apply.

- (w) electrical installation and machinery on construction sites (Regulation 24)

- (x) Fire precautions on construction sites (Regulation 29)

The provisions of the Environmental Regulations for Workplaces (Government Notice R2281 of 16 October 1987) shall apply.

In addition, the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all in accordance with Regulation 29 of the Construction Regulations.

OHS 10 MEASUREMENT AND PAYMENT

10.1 Principles

It is a condition of this contract that Contractors, who submit tenders for this contract, shall make provision in their tenders for the cost of all health and safety measures during the construction process. All associated activities and expenditure are deemed to be included in the Contractor's tendered rates and prices.

- (a) **Safety personnel**

The Construction Supervisor, the Construction Safety Officer, Health and Safety Representatives, Health and Safety Committee and Competent Persons referred to

in clauses 7.1 to 7.5 shall be members of the Contractor's personnel, and no additional payment will be made for the appointment of such safety personnel

(b) **Records and Registers**

The keeping of health and safety-related records and registers as described in paragraph 8 is regarded as a normal duty of the Contractor for which no additional payment will be considered, and which is deemed to be included in the Contractor's tendered rates and price

AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT NO 85 OF 1993

THIS AGREEMENT is made between.....

(hereinafter called the EMPLOYER of the one part, herein represented by:

.....

in his capacity as:

.....

AND:

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

.....

in his capacity as:

.....

duly authorised to sign on behalf of the Contractor.

WHEREAS the CONTRACTOR is the Mandatory of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of

CONTRACT:.....

AND WHEREAS the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHSA Amendment Act No 181/1993 (hereinafter referred to as the ACT);

NOW THEREFORE the parties agree as follows:

- 1. 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 thereof.**
- 2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.**
- 3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's CONSULTING ENGINEERS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the**

work included in the contract.

4. The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER 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 agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at for and on behalf of the **CONTRACTOR**

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

Thus signed at..... for and on behalf of the **EMPLOYER** on this

the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

CONTRACTOR'S HEALTH AND SAFETY DECLARATION

In terms of Clause 4(4) of the OHSA 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2014.

To that effect a person duly authorised by the tenderer must complete and sign the declaration hereafter in detail.

v. Declaration by Tenderer

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I propose to achieve compliance with the Regulations by one of the following:
 - (a) From my own competent resources as detailed in 4(a) hereafter:.....*Yes / No
 - (b) From my own resources still to be appointed or trained until competency is achieved, as detailed in 4(b) hereafter:.....*Yes / No
 - (c) From outside sources by appointment of competent specialist subcontractors as detailed in 4(c) hereafter:*Yes / No

(* = delete whatever is not applicable)

4. Details of resources I propose:

(Note: Competent resources shall include safety personnel such as a construction supervisor and construction safety officer as defined in Regulation 8, and competent persons as defined in Regulations 9-29, (all or individual regulations) as applicable to this contract)

- (a) Details of the competent and qualified key persons from my company's own resources, who will form part of the contract team:

NAMES OF COMPETENT PERSONS	POSITIONS TO BE FILLED BY COMPETENT PERSONS

- (b) Details of training of persons from my company's own resources (or to be hired) who still have to be trained to achieve the necessary competency:
- (i) By whom will training be provided?
 - (ii) When will training be undertaken?
 - (iii) List the positions to be filled by persons to be trained or hired:
.....
.....
- (c) Details of competent resources to be appointed as subcontractors if competent persons cannot be supplied from own company:
- Name of proposed subcontractor:
- Qualifications or details of competency of the subcontractor:
5. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 7(1) of the Construction Regulations, which plan shall be subject to approval by the Employer.
6. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
7. I hereby confirm that adequate provision has been made in my tendered rates and prices in the schedule of quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2014, and that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations (Regulation 33) for failure on the Contractor's part to comply with the provisions of the Act and the Regulations.
8. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.

SIGNATURE:

DATE:

(of person authorised to sign on behalf of the Tenderer)

**PRO FORMA NOTIFICATION FORM IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY
ACT 1993, CONSTRUCTION REGULATIONS 2014**

[This form must be completed and forwarded, prior to commencement of work on site, by all Contractors that qualify in terms of Regulation 3 of the Construction Regulations 2014, to the office of the Department of Labour]

NOTIFICATION OF CONSTRUCTION WORK

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

- (b) Name and tel. pf principal contractor's contact person:

2. Principal contactor's compensation registration number:

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

- (b) Name and tel. no of clients contact person or agent:

- 4 (a) Name and postal address of designer (s) for the project:

- (b) -----

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

6. Name /s of principal contractor's sub- ordinate supervisor on sire appointed in terms of Regulation 8 (2)

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

8. Nature of the construction work:

9. Expected commencement date:

10. Expected completion date:

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

Total: _____ Male: _____ Female _____

12. Planned number of contractors on the construction:

13. Name (s) of contractors already selected.

Principal Contractor

Date

Client's Agent (where applicable)

Date

Client

Date

ANNEXURE B: DRAWINGS FOR TENDER PURPOSES

ANNEXURE C: TRAFFIC DESIGNS

ANNEXURE D: TRAFFIC SIGNAL RELOCATION DESIGNS

ANNEXURE E: SPECIFICATIONS FOR DESIGN, SUPPLY, DELIVERY AND INSTALLATION OF SOLAR STREET LIGHTING