

Tender No. 149/2019 VOLUME 1

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

CIDB 6 EPPE AND HIGHER

PROCUREMENT DOCUMENT

(Based on GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS Third Edition (2015))

Issued by:

CITY OF MBOMBELA 1 NEL STREET MBOMBELA 1200

Contact:

Name: Chris Nkambule

Supply Chain Management

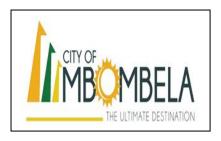
Chris.nkambule@mbombela.gov.za

Nonhle Zungu

Project Manager

Nonhle.Zungu@mbombela.gov.za

Telephone: 013 759 2358 013 759 2263



149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

Contents

Number Heading

THE TENDER

Part T1: Tendering procedures

T1.1 Tender notice and invitation to tender

T1.2 Tender data

Part T2: Returnable documents

T2.1 List of returnable documents

T2.2 Returnable schedules

THE CONTRACT

Part C1: Agreements and Contract data

C1.1 Form of offer and acceptance

C1.2 Contract data

Part 1 – Data by the *Employer* Part 2 – Data by the *Contractor*

C1.3 Form of Guarantee

Part C2: Pricing data

C2.1 Pricing assumptions

C2.2 Bill of Quantities

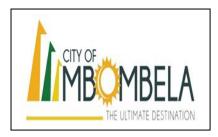
Part C3: Scope of work

C3 Scope of work

Part C4: Site Information

C4 Site Information

Bid No.: 1492019 Page 2 of 81



149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

Part T1: Tendering Procedures

T1.1 Tender Notice and Invitation to Tender

City of Mbombela invites tenders for APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION: Tender 149/2019

Tenderers should have a CIDB contractor grading of 7EP of Higher. 6EP Potentially Emerging Enterprises who satisfy criteria stated in the Tender Data may submit Tender offers.

Prequalification Criteria: An EME or QSE which is at least 51% owned by black people.

It is compulsory that service providers download a copy of the bid document that will <u>ONLY</u> be available as from **26 JULY 2019** on the etenders: <u>www.etenders.gov.za</u> on the tenders and notices folder, free of charge.

Duly completed bid documents and supporting documents which are TAX CLEARANCE CERTIFICATE AND SARS PIN, COPY OF B-BBEE CERTIFICATE, RATES AND TAXES CLEARANCE FROM RELEVANT LOCAL AUTHORITY & A FULL CSD REGISTRATION REPORT, together with the bid document must be sealed in an envelope clearly marked: "Bid No: 149/2019: APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION, CLOSING DATE 28 AUGUST 2019." 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.

A compulsory clarification meeting will take place on FRIDAY 02 AUGUST 2019 AT 10H00. Prospective bidders are requested to meet the Engineer at Mbombela Civic Centre Community Hall, 1 Nel Street.

Bids received by telegram, fax or e-mail will not be considered. Late bids shall not be accepted nor considered

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, 2017, where 80 points will be allocated in respect of price and 20 points in respect of B-BBEE status level of contribution.

Procurement Enquiries : Chris Nkambule

Tel: 013 759 2358

Technical Enquiries : Nonhle Zungu

Tel: 013 759 2263

Employer : The Municipal Manager: Mr. N Diamond

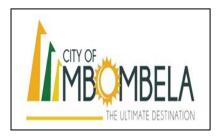
City of Mbombela

Po Box 45; Mbombela; 1200

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

Bid No.: 1492019 Page 3 of 81



149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

T1.2 Tender Data

The conditions of tender are the standard conditions of tender as contained in SANS 10845- 3:2015 Edition 1.

The standard conditions of tender make several references to the tender data for details that apply specifically to this tender. The tender data shall have precedence in the interpretation of any ambiguity or inconsistency between the tender data 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.

Data
The Employer is City of Mbombela
The tender documents issued by the employer comprise the following documents: THE TENDER Part T1: Tendering procedures T1.1 - Tender notice and invitation to tender T1.2 - Tender data Part T2: Returnable documents T2.1 - List of returnable documents T2.2 - Returnable schedules THE CONTRACT Part C1: Agreements and Contract data C1.1 - Form of offer and acceptance C1.2 - Contract data C1.3 - Form of guarantee Part C2: Pricing data C2.1 - Pricing assumptions C2.2 - Bill of Quantities Part C3: Scope of work C3 - Scope of work Part C4: Site information C4 - Site information
The employer's agent is : TBA
The language for communications is English
Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders: a) CIDB registration

Bid No.: 1492019 Page 4 of 81

Registered with the CIDB, at close of tender, 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 EP class of construction work. Tenderers whose CIDB registration expires within 21 days after close of tender, need to demonstrate that there is a reasonable chance of being registered in the appropriate grading designation, by submitting a copy of their application for CIDB registration, with their tender submission. Tenders received from such tenderers who are not capable of being registered in the required contractor designation, within 21 days after close of tender, will not be considered. Note that in terms of CIDB Act 38 of 2000 a registered contractor must apply for renewal of registration three months before the existing registration expires.

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.

Category of tender	Upper limits per CIDB Regulation 17
5 EP	R 6.5 m
6 EP	R 13 m
7 EP	R 40 m
8EP	R 130 m
9 EP	No Limit

Joint Ventures are eligible to submit tenders provided that:

- every member of the joint venture is registered with the CIDB;
- the lead partner has a contractor grading designation in the 6 EPPE class of construction work; and
- the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 6 EPPE 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 organisation having the required personnel, stating that they will undertake the necessary work on behalf of the tenderer in terms of a sub-consultant agreement, will be acceptable. Such undertaking must be attached to Forms D4 of the Returnable Schedules. Individuals must be identified for each of the key personnel listed under Forms D4.

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 D4 with personnel with equivalent competencies and subject to approval by the Employer. Such approval shall not be unreasonably withheld.

Where the Contracts Manager will not be employed on the Works full time, his powers will be delegated to the approved construction manager in accordance with Clause 4.3 of the Conditions of Contract.

Failure to comply with the requirements or to complete Forms D4.1, D4.2 and D4.3 may render the tender non-responsive.

Bid No.: 1492019 Page 5 of 81

	c) National Treasury Central Supplier Database
	Tenderers who are not registered on the National Treasury Central Supplier Database at close of tender, shall submit a copy of their application of registration, with their tender submission. Tenders received from such tenderers who have not submitted proof of their registration within 21 days after the closing date for tender submissions, will not be considered.
4.6	Failure to apply instructions contained in addenda may render a tenderer's offer nonresponsive in terms of Condition of Tender 5.8.
4.7	The arrangements for a compulsory clarification meeting / Briefing Session are: Location: Mbombela Nelspruit Civic Centre Community Hall, 1 Nel Street, Mbombela, 1200, (013 759 2263) Date: Friday, 02 August 2019 Starting time: 10 h 00 am
	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 enter and 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;(b) close the door and not allow any latecomers to enter.
	The signature on the attendance register and duly completed and signed Form A1 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 shall 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.
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 South African Rand (ZAR)
4.11	Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer or correct errors made by the tenderer and ensure all signatories to the tender offer initial all such alterations.
4.12	No alternative tender offers will be considered
4.13	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are:
	Location of tender box: City of Mbombela Civic Centre, Physical address: City of Mbombela Civic Centre, 1 Nel Street, Mbombela, 1200 Identification details: Tender reference number, Title of Tender and the closing date and time of the tender
4.13	Telephonic, telegraphic, telex, facsimile or e-mailed tenders offers shall not be accepted.

4.13.4	Copy of Tax Clearance Certificate issued by the South African Revenue Services with SARS pin attachment
	2) Company Registration Certificate
	Current Municipal Account/Valid lease Agreement Proof of CIDB Progretation
	4) Proof of CIDB Registration5) Registration on National Treasury central supplier database
	6) Workman's Compensation Certificate relevant to the Electrical works
	7) Valid original or certified copy of BBB-EE certificate
	8) Tenders bank details9) Full CSD report
	a) I dii Gob Teport
4.13.5	Submit only the signed original tender offer
4.15	The closing time for submission of tender offers is 11h00 hours on Friday, 28 August 2019.
4.16.1	The tender offer validity period is 12 weeks.
4.16.2	Where a tenderer, at any time after the opening of his tender offer but prior to entering into a contract based on his tender offer: 1) withdraws his tender;
	gives notice of his inability to execute the contract in terms of his tender; or 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.
5.1	The employer shall respond to clarifications received up to 7 working days before tender closing time.
5.2	The employer shall issue addenda until 5 working days before tender closing time.
5.4	The time and location for opening of the tender offer are: Time: 11h00 on Friday, 28 August 2019
	Location of tender box: Mbombela Civic Centre
F 0	Physical address: City of Mbombela Civic Centre, 1 Nel Street, Mbombela, 1200
5.9	Arithmetical errors, omissions, discrepancies and imbalanced unit rates
	Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount appearing in the summary to the Pricing Schedule shall govern.
	Check responsive tender offers for: a) the gross misplacement of the decimal point in any unit rate; b) omissions made in completing the pricing schedule or bills of quantities; or
	c) arithmetic errors in: i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or ii) the summation of the prices.
	d) imbalanced unit rates.
	Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers.
	Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows:
	a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and

the line item total shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted and the unit rate shall be corrected.

- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall be corrected.
- c) Where the unit rates are imbalanced adjust such rates by increasing or decreasing them and selected others while retaining the total of the prices derived after any other corrections made under (a) and (b) above.

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

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

The tenderer is required to submit balanced unit rates for rate only items in the pricing schedule. The rates submitted for these items will be taken into account in the evaluation of tenders.

5.11.5 The procedure for the evaluation of responsive tenders is Method 2: Functionality, Price and Preference.

In the case of a functionality, price and preference:

- 1) Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data.
- 2) No tender must be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for functionality as indicated in the tender invitation.
- 3) Tenders that have achieved the minimum qualification score for functionality must be evaluated further in terms of the preference points system prescribed in below.

The total number of tender evaluation points (T_{EV}) shall be determined in accordance with the following formula.

$$T_{EV} = f_1 (N_{FO} + N_P) + f_2 N_Q$$

where f_1 and f_2 are fractions, f_1 equals 1 minus f_2 and f_2 equals

 N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with 5.11.7 where the score for financial offer is calculated using the following formula

$$A = (1 - (\underline{P - Pm}))$$

 Pm

and W₁ equals:

- 1) 90 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of R50 000 000 or
- 2) 80 where the financial value inclusive of VAT of one or more responsive tender offers have a value that equals or is less than R 50 000 000

 N_P is the number of tender evaluation points awarded for preferences claimed in accordance with the Preferencing Schedule

 N_Q is the number of tender evaluation points awarded for quality offered in accordance with 5.11.9 where $W_2 = 100$.

Up to 100 minus W₁ tender evaluation points will be awarded to tenderers who complete the preferencing schedule and who are found to be eligible for the preference claimed.

Bid No.: 1492019 Page 8 of 81

5.11.9	The quality criteria and maximum score in respect of each of the criteria	a are as follow	s:
	Quality criteria	Maximum number of points	
	Experience on previous contracts of a similar scope (over last Five years)	50	
	Financial Reference	20	
	Plant and Equipment	15	
	Key Personnel	15	
	Maximum possible score for quality (M _s)	100	
	The minimum number of evaluation points for quality is 70 out of 100		l
5.13	Tender offers will only be accepted if:		
	 a) the tenderer is registered on the Central Supplier Database government (see https://secure.csd.gov.za/) unless it is a foreign entity b) the tenderer is in good standing with SARS according to the Central the tenderer submits a letter of intent from an approved insure Performance Bond to the format included in Part C1.3 of this proced the tenderer is registered with the Construction Industry Develop contractor grading designation; e) the tenderer or any of its directors/shareholders is not listed on the interms of the Prevention and Combating of Corrupt Activities Act from doing business with the public sector; f) 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 give f) the tenderer has completed the Compulsory Declaration and there are may impact on the tenderer's ability to perform the contract in the or potentially compromise the tender process; g) the tenderer is registered and in good standing with the compensation insurer; h) the employer is reasonably satisfied that the tenderer has in terms Regulations, 2003, issued in terms of the Occupational Health and necessary competencies and resources to carry out the work safe in the tenderer is a registered electrical contractor with labour department. 	supplier with not ral Supplier Dater undertaking urement docur oment Board in Register of Tof 2004 as a part of a written not are no conflicts best interests a sation fund or sof the Construct Safety Act, 1981.	tabase; g to provide the ment n an appropriate ender Defaulters person prohibited ice to this effect; of interest which of the employer with a licensed
5.17	I) the tenderer had not alter this bid document Prospective bidders are expected to submit two copies of tender documents. The 1st tender document must be original with valid certif documents/attachments (clearly marked "original on the front page). 2 copy of the entire submission packaged exactly as the original submission the front page). This condition must be adhered to in order to be consi	fied copies of the fied tender documents fion (clearly ma	he required ment must be a arked "copy on
5.18	Pre-qualification criteria for preferential procurement are applicable		
	In terms of regulation 4 of the PPPFA this tender shall be pre-qualified groups (a) A tenderer having a stipulated minimum B-BBEE status level of cord (b) An EME or QSE; (c) a tenderer subcontracting a minimum of 30% to (l) An EME or QSE which is at least 51% owned by black people (ii) An EME or QSE which is at least 51% owned by black people (iii) An EME or QSE which is at least 51% owned by black people (iv) An EME or QSE which is at least 51% owned by black people (v) An EME or QSE which is 51% owned by black people living areas or townships; (vi) A cooperative which is at least 51% owned by black people	ntributor 1 o ole; ple who are yo ple who are wo ople with disab g in rural or und	outh; omen; ilities;

(vii) An EME or QSE which is at least 51% owned by black people who are military veterans; (viii) An EME or QSE.

A tender that fails to meet any pre-qualifying criteria stipulated in the tender documents is an unacceptable tender

5.19 OTHER SPECIAL CONDITONS OF THE CONTRACT

- 1. This Tender is broken into 4 (four) bids to allow 4 (four) contractors to participate. All allocated works should be executed at once and therefore for that reason 1 (one) service provider will be appointed per Region (bid).
- 2. The bids are subject to local content and production as per determination from dti website. Minimum Stipulated Local Content Designation for Steel Value-added Products is 100%.

Product for designation	Minimum local content
Steel Power Pylons	100%
Monopole Pylons	100%
Steel Substation Structures	100%
Powerline Hardware (listed in Appendix A)	100%
Street Lighting Steel Poles	100%
Steel Lattice Towers and Masts	100%

Failure to complete the local content forms will lead to disqualification

5.20 All requests shall be in writing.

EVALUATION CRITERIA

1. FINANCIAL OFFER - 80 Points

2. B-BBEEE - 20 Points

The following table is to be used to calculate the score out of 10 for B-BBEE

B-BBEE Status Level of Contributor	Number of points
1	20
2	18
3	14
4	12
5	8
6	6
Non-compliant contributor	0

3. QUALITY (5.11.9)

3.1 **SIMILAR PROJECT/SCOPE**

The Tenderer must provide detail and references of at least three similar projects where the value of the project exceeded **R3 000 000** completed the past five years. Similar projects means projects related to INSTALLATION OF HIGH MAST LIGHTING.

ITEM	SIMILAR PROJECT DETAILS	MAXIMUM POINTS TO BE ALLOCATED	 POINTS CLAIMED
1	Description:	25	
2	Description:	25	
	SUB TOTAL: Experience, Reputation and References	50	

Note: copies of appointment letters / work-order with project completion certificate and letter of reference on letterheads of the institution, regarding similar work are required with the following information contained: (i) Description, (ii) Value, (iii) Actual Construction period, (iv) Date completed.

Bid No.: 1492019 Page 11 of 81

3.2 **FINANCIAL REFERENCES**

Note: Copies of banking details and rating.

ITEM	DESCRIPTION	MAXIMUM POINTS TO BE ALLOCATED	 POINTS CLAIMED
1	Bank rating with stamp from your bank. (Letter must make reference to this project and the amount of your bid. Else no point to be awarded)	A = 8 B = 6 C=4 D and lower = 0	
	Audited Financial Statements (Not older than 2 Financial Years).	5	
3	Letter of Intent to provide 10% guarantee from registered financial service Provider. Letter must make reference to this project and the amount of your bid. Or else no point to be awarded.	2	
	SUB TOTAL	15	

3.3 **PLANT AND EQUIPMENT**

Note: Tenderers to submit ownership proof in the name of company/director to claim for full (100%) points OR Lease agreement to claim for half (50%) points.

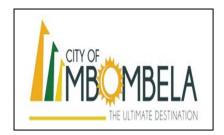
ITEM	DESCRIPTION	MAXIMUM POINTS TO BE ALLOCATED	POINTS OBTAINABLE	POINTS CLAIMED
1	Load & Transport Truck (min 8 Ton) with hi-up (Copy of e-Natis or vehicle registration certificate) Registration No.:	6		
2	Ton LDV (Copy of e-Natis or vehicle registration certificate) Registration No.:	5		
3	Hoisting equipment - Single drum winch with stainless steel rope and hydraulic power tool with remote control. (Provide proof of test certificate plus proof of ownership/lease)	4		
	Installation and Electrical Testing equipment list for installation of High.	3		
5	List of safety equipment	2		
3	Hoisting equipment - Single drum winch with stainless steel rope and hydraulic power tool with remote control. (Provide proof of test certificate plus proof of ownership/lease) Installation and Electrical Testing equipment list for installation of High.	3 2		

Bid No.: 1492019 Page 12 of 81

3.4 **KEY PERSONNEL**

Note: Name/s of various employees occupying the positions below must be stated; certified copies (not older than 3 months) of qualifications must be attached in order to qualify for points.

ITEM	TARGETED GOALS	MAXIMUM POINTS TO BE ALLOCATED	POINTS OBTAINABLE	POINTS CLAIMED
1	Electrician/Site Supervisor with minimum of 3 years electrical work in possession of: 1. CV with correct training and experience 2. Trade Test qualification 3. Electrical Installation certificate/card Name:	3 3 2		
2	Rigger with minimum of 3 years relevant work in possession of: 1. CV with correct training and experience 2. Trade Test qualification Name:	3 3		
	SUB-TOTAL	15		



149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

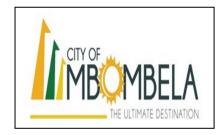
Part T2: RETURNABLE DOCUMENTS

T2.1 List of Returnable Documents

Notes to tenderer:

- 1. Returnable documents have been based on the CIDB Standard for Uniformity in Construction Procurement and incorporate National Treasury requirements within them. Forms, certificates and schedules for completion by the tenderer for use in the quantitative and qualitative evaluation of the tender are (Forms A to E) listed as follows:
- FORM A1: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING
- FORM A2: CERTIFICATE OF AUTHORITY FOR SIGNATORY
- FORM A3: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE
- FORM A4: SCHEDULE OF ADDENDA TO TENDER DOCUMENTS
- FORM A5: CERTIFICATE OF TAX COMPLIANCE
- FORM A6: CERTIFICATE OF INSURANCE COVER
- FORM A7: TENDERER'S BANK DETAILS
- FORM A8: CERTIFICATE OF COMPLIANCE WITH COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT, 1993 (ACT NO. 130 OF 1993)
- FORM A9: CERTIFICATE OF REGISTRATION WITH CIDB
- FORM C1: TENDERER'S B-BBEE VERIFICATION CERTIFICATE
- FORM D1: SCHEDULE OF TENDERER'S PLANT AND EQUIPMENT
- FORM D2.1: TENDERER'S KEY PERSONNEL EXPERIENCE (SITE SUPERVISOR / ELECTRICIAN)
- FORM D2.2: TENDERER'S KEY PERSONNEL EXPERIENCE (RIGGER)
- FORM D3: TENDERERS EXPERIENCE
- FORM D4: SCHEDULE OF SPECIALIST SUBCONTRACTORS
- FORM E1: PROPOSED AMENDMENTS AND QUALIFICATIONS
- FORM E2: COMPULSORY DECLARATION
- FORM E3: MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS
- FORM E4: ANNUAL FINANCIAL STATEMENTS DECLARATION
- FORM E5: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES
- FORM E6: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS
- 2. Failure to fully complete the relevant returnable documents may render such a tender offer non-responsive.
- 3. Tenderers shall note that their signature appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided.
- 4. 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 15.2 to terminate the contract.
- 5. These forms must be completed in non-erasable ink and any alterations made prior to tender closure countersigned by an authorised signatory.

Bid No.: 1492019 Page 14 of 81



149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

T2.2 Returnable Schedules

FORM A1: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

Notes to Tenderer:

1. <u>The attendee's name, details and signature must appear on the attendance register</u> OR this Certificate of Attendance must be completed and if not then 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)
conducted by
in the presence of (Employer's representative)
TENDERER'S REPRESENTATIVE (Signature)
TENDEREN O REF REGENTATIVE (Oignatato)
EMPLOYER'S REPRESENTATIVE (Signature)

Bid No.: 1492019 Page 15 of 81

FORM A2: CERTIFICATE OF AUTHORITY FOR SIGNATORY

- 1. The signatory for the tenderer shall confirm his/her authority thereto by attaching on the tendering company's letterhead a duly signed and dated copy of the relevant resolution of the board of directors/partners.
- 2. In the event that the tenderer is a joint venture, a certificate is required from each member of the joint venture clearly setting out:
 - authority for signatory,
 - undertaking to formally enter into a joint venture contract should an award be made to the joint venture,
- name of designated lead member of the intended joint venture, as required by tender condition F.2.13.4.
- 3. The resolution below is given as an example of an acceptable format for authorisation, but submission of this page with the example completed shall not be accepted as authorisation of the tenderer's signatory.

By resolution of the board of directors passed at	a meeting held on
Mr/Ms	,
whose signature appears below, has been duly tender for	authorised to sign all documents in connection with the
	RICAL CONTRACTORS FOR SUPPLY, DELIVERY AND OR A THREE -YEAR PERIOD IF AND WHEN REQUIRED
•	behalf of enter name of tenderer in block capitals
SIGNED ON BEHALF OF THE COMPANY:	
IN HIS/HER CAPACITY AS:	
DATE:	
SIGNATURE OF SIGNATORY:	
WITNESS:SIGNATURE	SIGNATURE
 NAME (PRINT)	NAME (PRINT)

Bid No.: 1492019 Page 16 of 81

FORM A3: 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 F.2.1.1). 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:	
SIGNED BY TENDERER:	

Bid No.: 1492019 Page 17 of 81

FORM A4: RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer: Date **Title or Details** 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. Attach additional pages if more space is required. Signed Date Name Position Tenderer

FORM A5: CERTIFICATE OF TAX COMPLIANCE (INCORPORATING SBD2)

Note to tenderer:

The tenderer shall attach to this page an original current Tax Clearance certificate and VAT Registration certificate which shall be obtained by the tenderer from the South African Revenue Service (SARS). In the event of a joint venture, each member shall comply with the above requirement.

Where such certificates are no longer issued by SARS the tenderer shall complete the declaration below.
I,(name)
the undersigned in my capacity as(position)
on behalf of (name of company)
herewith grant consent that SARS may disclose to the CITY OF MBOMBELA our tax compliance status. For this purpose our unique security personal identification number (PIN) is
SIGNED BY TENDERER:

Bid No.: 1492019 Page 19 of 81

FORM A6: CERTIFICATE OF INSURANCE COVER

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

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

i) Name of Tenderer:
ii) Period of Validity:
iii) Value of Insurance:
☐ Insurance for Works and Contractor's Equipment
Company:
Value:
☐ Insurance for Contractor's Personnel
Company:
Value:
☐ General public liability
Company:
Value:
Company:
Value:
SIGNED BY TENDERER:

FORM A7: TENDERER'S BANK DETAILS

The tenderer shall provide the following:

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

i) Name of Account Holder:

ii) Account Number:

iii) Bank name:

iv) Branch Number:

v) Bank and branch contact details

SIGNED BY TENDERER:

FORM A8: CERTIFICATE OF COMPLIANCE WITH COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT, 1993 (ACT NO. 130 OF 1993)

Notes to tenderer:

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

SIGNED BY TENDERER:	

Bid No.: 1492019 Page 22 of 81

FORM A9: CERTIFICATE OF 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 F.2.1.1). 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:

SIGNED BY TENDERER:

Bid No.: 1492019 Page 23 of 81

FORM C1: TENDERER'S B-BBEE VERIFICATION CERTIFICATE

Notes to tenderer:

- The tenderer shall attach to this form a valid original or original certified copy of the BBBEE verification certificate issued in accordance with the Construction Sector Codes of Practice promulgated in Gazette 32305 on 5 June 2009 (see F.3.11.8 of the tender data) subject to such certificate having been issued before 17 February 2016, alternatively submit the B-BBEE verification certificate issued in accordance with the revised Notice of Clarification published in Notice 444 of 2015 of Government Gazette No.38799 on 15 May 2015 by the Department of Trade and Industry.
- 2. In the event of a joint venture (JV), a consolidated B-BBEE verification certificate in the name of the JV shall be attached.
- 3. The attached verification certificate and the associated assessment report shall identify:
 - (a) The name and domicilium citandi et executandi of the tenderer.
 - (b) The registration and VAT number of the tenderer.
 - (c) The dates of granting of the B-BBEE score and the period of validity.
 - (d) The expiry date of the verification certificate.
 - (e) A unique identification number.
 - (f) The standard and/or normative document, including the issue and/or revision used to evaluate the tenderer.
 - (g) The name and/or mark/logo of the B-BBEE verification agency or registered auditor.
 - (h) The category (Generic, QSE, Exempt) in which the tenderer has been measured.
 - (i) The B-BBEE status level.
 - The South African National Accreditation System (SANAS) or Independent Regulatory Board of Auditors (IRBA) logo on the verification certificate once verification agencies have been accredited.
 - (k) The B-BBEE procurement recognition level.
 - (I) The score achieved per B-BBEE element.
 - (m) The % black shareholding.
 - (n) The % black women shareholding.
 - (o) The % black persons with disabilities
 - (p) The value added status of the tenderer.
- 4. The Employer will not be responsible to acquire data that it needs for its own reporting systems and which may not form part of a verification agency's standard certificate format

The tenderer, at its own cost, must acquire any missing specified data listed in 3 above from its selected verification agency or registered auditor and have it recorded on the certificate. Alternatively, such missing data must be supplied separately, but certified as correct by the same verification agency or registered auditor and also attached to this form. Failure to abide by this requirement will result in such tenderer scoring zero preference.

SIGNED BY TENDERER:	 	

Bid No.: 1492019 Page 24 of 81

FORM D1: SCHEDULE OF TENDERER'S PLANT AND EQUIPMENT

Note to tenderer:

PLANT AND

EQUIPMENT TYPE

The tenderer shall provide details of the major plant and equipment required for this project.

The tenderer shall state below what constructional plant will be immediately available for this contract, what constructional plant will become available by virtue of outstanding orders, and what further constructional plant will be acquired or hired for the work should the tenderer be awarded the contract.

DATE OF

MANUFACTURE

AVAILABILITY (State

either I, O or H)

- a) Constructional plant immediately available (I)
- b) Constructional plant on order (O)
 - (State details of arrangements made, with delivery dates)
- c) Constructional plant that will be acquired or hired (H) (State details of delivery arrangements)

NUMBER TO BE USED

ON THIS PROJECT

SIGNED BY TENDERER:

Bid No.: 1492019	Page 25 of 81

FORM D2.1: TENDERER'S KEY PERSONNEL EXPERIENCE (SITE SUPERVISOR / ELECTRICIAN)

Note	to	tenderer:	

The tenderer shall provide details of previous experience required for this project The tenderer is referred to clause F2.1.1 (b) of the Tender Data and shall insert in the spaces provided below details of the key personnel required to be in the employment of the tenderer or other organisation, in order for the tenderer to be eligible to submit a tender for this project. Proof of qualification and CV must be appended to this form. CV to be signed and dated by the owner as an indication of consent to the responsibility of this work. Qualification must be certified. NO points on experience and certificates shall be awarded to unsigned CV and non-certified qualification.

NAME	POSITION IN TEAM	QUALIFICATION	NO. OF YEARS EXPERIENCE
	SITE SUPERVISOR / ELECTRICIAN		

FORM D2.2: TENDERER'S KEY PERSONNEL EXPERIENCE (RIGGER)

NAME	POSITION IN TEAM	QUALIFICATION	NO. OF YEARS EXPERIENCE
	RIGGER		

Comments:

I confirm that the information provided herein is true, that the projects reported and the corresponding responsibilities are truly the experiences of the firm or consortium of firms tendering for this project.

SIGNED BY TENDERER:

Bid No.: 1492019 Page 26 of 81

FORM D3: TENDERER'S EXPERIENCE

Note to tenderer:

The tenderer shall provide details of previous experience required for this project.

The experience of the Tenderer or joint venture partners in a consortium will be evaluated on the basis of experience in similar projects or similar areas and conditions in relation to the scope of work required for this project.

Tenderers should briefly provide details of the 5 most recent relevant projects and status of project

(List only the most recent 5 projects of the firm that the tenderer considers relevant to the specified scope of works

CLIENT	DESCRIPTION OF PROJECT	PROJECT START DATE	PROJECT END DATE	VALUE OF WORK (i.e. the service provided) inclusive of VAT (Rand)	NUMBER OF MONTHS DELAY ON PROJECT I.E. WHERE NO EXTENSION OF TIME GRANTED BY CLIENT	CONTACT PERSON AND FIRM	CONTACT No.

CONTACT PERSON AND FIRM CONTACT NUMBER

Comments:

I confirm that the information provided herein is true, that the projects reported and the corresponding responsibilities are truly the experiences of the firm or consortium of firms tendering for this project.

SIGNED BY TENDERER:	SIGNED BY	TENDERER:				
---------------------	-----------	-----------	--	--	--	--

Bid No.: 1492019 Page 27 of 81

FORM D4: SCHEDULE OF SPECIALIST SUBCONTRACTORS

With regard to sub-clause 4.4 of the FIDIC Conditions of Contract as amended:

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 IT EIVI	NAME OF SPECIALIST SUBCONTRACTOR

SIGNED BY TENDERER:

Bid No.: 1492019 Page 28 of 81

FORM E1: PROPOSED AMENDMENTS AND QUALIFICATIONS

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.

Page	Clause or item	Proposal

Tenderer	r	
Name	Position	
Signed	Date	

Bid No.: 1492019 Page 29 of 81

FORM E2: COMPULSORY DECLARATION

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: **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 State Not Registered if not registered for VAT **VAT registration number:** Section 4: CIDB registration number CIDB Registration number (if applicable) **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). Personal tax reference Full name of principal **Identity number** number

Bid No.: 1492019 Page 30 of 81

Attach separate page if necessary	ary				
Section 7: Record in the ser	vice of the stat	е			
Indicate by marking the relevar the last 12 months in the service			al is curre	ently or has	s been withi
□ a member of any municipa	l council 🛛	an employee of	any dep	artment, n	ational or
□ a member of any provincial	legislature	provincial public er within the mean			
 a member of the National or the National Council of F 		Management Act of	of 1999 (A	ct No. 1 of	1999)
 a member of the board of of any municipal entity 	directors of	a member of an national or provi	account ncial pub	-	ity of any
□ an official of any muni municipal entity	cipality or □	an employee of legislature	of Parliam	nent or a	provincial
If any of the above boxes are	marked, disclo	ose the following:			
				Status of	service
	Name of insti	tution, public offic	e,	(tick appropriate	
Name of principal		an of state and pos		column)	
	held			Current	Within last 12 months
*insert separate page if necess	arv.				
· · · · ·		namila of the state			
Section 8: Record of family refamily member: a person's spindigenous law, domestic partrelationship results from birth, n	ouse, whether ner in a civil uni	in a marriage or in on, or child, parent	a custom	-	-
Indicate by marking the relevan in section 5 is currently or has following:					
□ a member of any municipa	l council	an employee of			•
a member of any provincial	•	national or proconstitutional institu	ovincial ution with	•	entity or
 a member of the National or the National Council of F 	Province	Public Finance Ma 1999)			•
 a member of the board of of any municipal entity 	directors of	a member of an	account	ing authori	ity of any
 an official of any muni municipal entity 	cipality or		ncial publ	-	

Bid No.: 1492019 Page 31 of 81

	□ an employee of Parlia legislature	ment or a	provincial
Name of family member	Name of institution, public office, board or organ of state and position	Status of service (tick appropriate column)	
Name of family member	held	Current	Within last 12 months
*insert separate page if necessa	игу		
Section 9: Record of terminati	on of previous contracts with an organ	of state	
	endering entity including any of its joint ver ons other than the employer no longer req nt in terms of the contract.		
☐ Yes ☐ No (Tick app	ropriate box)		
If yes, provide particulars (intere	st 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:

- i) 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)
 - b) National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)
- ii) neither the tendering entity of 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;
- viii) 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

Bid No.: 1492019 Page 32 of 81

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	
Enterprise name		

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.

Bid No.: 1492019 Page 33 of 81

FORM E3: MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS

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

- a) consultancy services 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	1:	Enterpris	e Details
-----------	----	------------------	-----------

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

Section 2: Declaration for consultancy services:

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

Name of organ of state	Estimated number of contracts	Nature of service, e,g, quantity surveying	Service 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

Bid No.: 1492019 Page 34 of 81

	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 (ie: all municipal accounts are paid up to date);
3)	source of goods and / or services:
С	(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 . %
state	ermore confirm that the following contracts were awarded to the enterprise by an organ of during the last five years and attached particulars of any material non-compliance or dispute rning the execution of such contracts:
	Estimated

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

Bid No.: 1492019 Page 35 of 81

FORM E4: ANNUAL FINANCIAL STATEMENTS DECLARATION

The unothat:	dersigned, who warrants that he / she is duly authorised to do so on behalf of the respondent, confirms			
1)	The enterprise's financial year end is			
2)	The enterprise's financial statements have been prepared in accordance with the provisions of the Companies Act of 2008 or the Close Corporation Act of 1984, as applicable			
3)	The enterprise has compiled its financial accounts [tick one box]:			
	□ internally □ independently			
4)	The following statement applies to the enterprise [tick one box and provide relevant information]			
	□ enterprise has had its financial statements audited;			
	name of auditor			
	\square enterprise is required by law to have an independent review of its financial statements			
	name of independent reviewer			
	 enterprise has not had its financial statements audited and is not required by law to have an independent review or audit of such statements 			
5)	The attached income statement and balance sheet is a true extract from the financial statements complying with applicable legislation for the preceding financial year within 12 months of the financial year end.			
	[Attach the income statement and the balance sheet contained in the financial statement]			
6)	The annual turnover for the last financial year is R			
7)	The total assets as at the end of the last financial year is R			
8)	The total liabilities as at the end of the financial year is R			
-	declare that the contents of this Declaration are within my personal knowledge, and save where therwise are to the best of my belief both true and correct.			
S	Signed Date			
	Name Position			
Tei	nderer			

Bid No.: 1492019 Page 36 of 81

FORM E5: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed by joint ventures.

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

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature
		Name
		Designation
		Signature
		Name
		Designation
		Signature
		Name
		Designation

Bid No.: 1492019 Page 37 of 81

FORM E6: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

LC = [1 - x / y] *100

Where

- x is the imported content in Rand
- y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial development/ip.jsp at no cost.

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

Bid No.: 1492019 Page 38 of 81

2. Definitions

- 2.1. "bid" includes written price quotations, advertised competitive bids or proposals;
- 2.2. "bid price" price offered by the bidder, excluding value added tax (VAT);
- 2.3. "contract" means the agreement that results from the acceptance of a bid by an organ of state:
- 2.4. "designated sector" means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;2.5. "duly sign" means a Declaration Certificate for Local Content that has been signed by the
- 2.5. "duly sign" means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
- 2.6. "imported content" means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. "**local content**" means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. "**stipulated minimum threshold**" means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. "sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
- 3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	Stipulated minimum threshold
	%
	%
Does any portion of the services, works or goods offered	% d have any imported content?
(Tick applicable box)	
YES NO	

Bid No.: 1492019 Page 39 of 81

4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

Bid No.: 1492019 Page 40 of 81

LOCAL CONTENT DECLARATION

(REFER TO ANNEX B OF SATS 1286:2011)

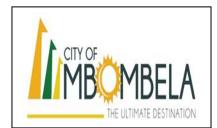
RE:	CAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICE SPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF MBER/PERSON WITH MANAGEMENT RESPONSIBILITY RTNERSHIP OR INDIVIDUAL)	EXECUTIVE OR SENIOR
IN F	RESPECT OF BID NO.	
ISS	UED BY : (Procurement Authority / Name of Municipality / Municipal Enti	ty):
NB		
1	The obligation to complete, duly sign and submit this declaration cannot authorized representative, auditor or any other third party acting on be	
2	Guidance on the Calculation of Local Content together with Local Co (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrishould first complete Declaration D. After completing Declaration Declaration E and then consolidate the information on Declaration submitted with the bid documentation at the closing date and substantiate the declaration made in paragraph (c) below. Declaration the bidders for verification purposes for a period of at least 5 ye required to continuously update Declarations C, D and E with the act the contract.	ial development/ip.jsp. Bidders D, bidders should complete C. Declaration C should be time of the bid in order to ations D and E should be kep ars. The successful bidder is
3		
	e undersigned,	,
do l	nereby declare, in my capacity as	of
follo	(name owing:	e of bidder entity), the
(a)	The facts contained herein are within my own personal knowledge.	
(b)	I have satisfied myself that:	
	 the goods/services/works to be delivered in terms of the above- minimum local content requirements as specified in the bid, a SATS 1286:2011; 	
(c)	The local content percentages (%) indicated below has been calculated clause 3 of SATS 1286:2011, the rates of exchange indicated in prinformation contained in Declaration D and E which has been consolidated.	paragraph 4.1 above and the
	Bid price, excluding VAT (y)	R
	Imported content (x), as calculated in terms of SATS 1286:2011	R
	Stipulated minimum threshold for local content (paragraph 3 above)	
	Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

Bid No.: 1492019 Page 41 of 81

(d) I accept that the Procurement Authority / Municipality / Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011. (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000). SIGNATURE: DATE: _____ WITNESS No. 1 DATE: _____ DATE: _____ WITNESS No. 2 _____

Bid No.: 1492019 Page 42 of 81



CITY OF MBOMBELA

149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

Part C1: Agreements and Contract Data

C1.1 Form of Offer and Acceptance

Form of Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, 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 VATIS:	
(in words)		Rand
R	(in figures)	
returning one col agreed period of	py of this document including the Schedule of De	otance part of this Form of Offer and Acceptance and viations (if any) to the tenderer before the end of the tenderer becomes the party named as the Contractor
Signature(s)		Date
Name(s)		
Capacity		
For the tenderer: (Insert name and address of organisation)		
Name & signature of witness		Date

Bid No.: 1492019 Page 43 of 81

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 C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part C2 Pricing Data

Part C3 Scope of Work: Works Information

Part C4 Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable 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 Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of 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. 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.

Signature	(s)		
Name(s)			
Capacity			
for	the		
Employer			
		(Insert name and address of organisation)	
Name	&		
signature witness	of		Date

Bid No.: 1492019 Page 44 of 81

Schedule of Deviations

1 Subject	
Details	
2 Subject	
Details	
	 ٠.
	 • •
•	
Details	 ٠.
	 • •
-	
Details	
-	
Details	
	 • •

By the duly authorised 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.

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from the draft contract, 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.

Bid No.: 1492019 Page 45 of 81

CITY OF MBELA THE ULTIMATE DESTINATION

CITY OF MBOMBELA

149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

C1.2 Contract Data

Part 1: Data Provided by the Employer

CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works, Second Edition, 2010, published by the South African Institute of Electrical Engineering, Private Bag X200, Halfway House, 1685, are applicable to this Contract and is obtainable from www.saiee.org.za.

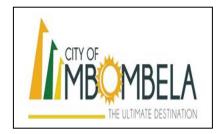
CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Second Edition, 2010, are applicable to this Contract:

Clause	Data		
1.1.1.13	The Defects Liability Period is 12 months.		
1.1.1.15	The name of the Employer is CITY OF MBOMBELA		
1.1.1.26	The Pricing Strategy is Fixed Price Contract.		
1.2.1.2	The address of the Employer is CITY OF MBOMBELA PO Box 45 Nelspruit 1200		
1.1.1.16	The name of the Engineer is ST Sibeko		
1.2.1.2	The address of the Engineer is CITY OF MBOMBELA PO Box 45 Nelspruit 1200		
5.3.1	The documentation required before commencement with Works execution are:		
	Health and Safety Plan (Refer to Clause 4.3)		
	Initial programme (Refer to Clause 5.6)		
	Security / Performance Guarantee (Refer to Clause 6.2)		
	Insurance (Refer to Clause 8.6)		
5.3.2	The time to submit the documentation required before commencement with Works execution is 14 days.		
5.8.1	The non-working days are Sundays		
	The special non-working days are:		
	(1) Public holidays		
	(2) The year-end break commencing on 12 December 2018 and ending on 8 January 2019		
5.13.1	The penalty for failing to complete the Works is R20 000 per calendar day		

Bid No.: 1492019 Page 46 of 81

5.16.3	The latent defect period is 12 months
6.8.2	The value of payment certificates is to be adjusted in accordance with the Contract Price Adjustment Schedule on page 86 of GCC 2015, where.
	The value of "x" is 0,10 The values of the co-efficient are: a = 0,25 b = 0,30 c = 0 35 d = 0,10
	The indices for "L", "P", "M" and "F" are the following as published by Statistics South Africa:
	'L" is the "Labour Index" As published in the Statistical News Release P0141 Additional tables: Table 14 "CPI – all items, according to area" of Statistics South Africa.
	"P" is the "Contractors Equipment Index" as published in the Statistical News Release PO151, Table 4 – "Electrical Contracting Materials" of Statistics South Africa.
	"M" is the "Materials Index" published in the Statistical News Release PO151, Table 3 - "Electrical Engineering" of Statistics South Africa.
	"F" is the "Fuel Index" as published in Statistical News Release PO151, Table 4 of Statistics South Africa.
	The site is located in the City of Mbombela.
	The base month is one month prior to the closing date of the tender.
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% to a maximum of 5% of the contract value.
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance
	sum is R0.
8.6.1.3	The limit of indemnity for liability insurance is R8m .
10.5.3	The number of Adjudication Board Members to be appointed is as per CITY OF MBOMBELA
	regulations.
10.7.1	The determination of disputes shall be by arbitration.



CITY OF MBOMBELA

149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

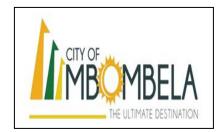
Part 2: Data provided by the Contractor

The Contractor is advised to read the *General Conditions of Contract for Construction Works (2015)*, published by the South African Institution of Civil Engineering, in order to understand the implications of this Data which is required to be completed. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (tel 011-805 5947).

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

Clause	Data		
	The Contractor is.		
1.1.1.9	Name:		
	The address of the Contractor is:		
1.2.1.2	The address of the Contractor is:		
1.2.1.2			
	Address (physical):		
	Address (postal):		
	Telephone: Facsimile: .		
	e-mail:		
	e-mail.		
1.1.1.14	The time for achieving Practical Completion is		
0.0.4	The security to be provided by the Contractor shall be one of the following	owing:	
6.2.1	Type of security	Contractor's	
	(Indicate if Value Added Tax is excluded from the Contract Sum	choice. Indicate	
	and the value of the Works for calculating the percentages)	"Yes" or "No"	
	Cash deposit of 10% of the Contract Sum.		
	Performance guarantee of 10 % of the Contract Sum.		
6.5.1.2.3	The percentage allowance to cover overhead charges is	_%.	

Bid No.: 1492019 Page 48 of 81



CITY OF MBOMBELA

149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

C1.3 Form of Guarantee

following conditions:

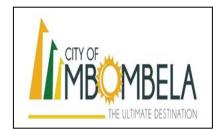
Employer: (name and address)
Contract No:
(Contract title)
WHEREAS
(hereinafter referred to as "the Employer") entered into, on theday of
a Contract with
(hereinafter called "the Contractor') for (CONTRACT TITLE)
atat
AND WHEREAS it is provided by said Contract that the Contractor shall provide the Employer with security by way of a guarantee for the due and faithful fulfilment of the Contract by the Contractor;
AND WHEREAS
NOW THEREFORE WE,
do hereby guarantee to the Employer under renunciation of the benefits of division and exclusion the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the

- 1. The Employer shall, without reference and/or notice to me/us, have complete liberty of action to act in any manner authorised and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the Due Completion Date of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our 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 Due Completion Date which the Employer may make, give, concede or agree to under the said Contract.
- 2. This guarantee shall be limited to the payment of a sum of money.
- 3. The Employer shall be entitled, without reference to us, to release any securities held by it, and to give time to or compound or make any other arrangement with the Contractor.
- 4. 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 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 or liquidated.

Bid No.: 1492019 Page 49 of 81

5.	My/Our total liability in terms hereof shall be limited to the sum of R
	which amount I/we agree to hold at your disposal. (10 % of the tender sum)
6.	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 domicilium citandi et executandi for all purposes arising hereof at
	VITNESS WHEREOF this guarantee has been executed by us atonon
Signa	ature
Duly	authorized to sign on behalf of: (Guarantor)
Addre	9SS
Λοννί	tnesses:
AS WI	uiesses.
1	
2	

Bid No.: 1492019 Page 50 of 81



CITY OF MBOMBELA

149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

Part C2: Pricing Data

C2.1 Pricing Assumptions

- 1. The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work (as amended) published and issued by the Association of South African Quantity Surveyors (Sixth Edition (Revised)), 1999. Where applicable the:
 - a) Civil engineering work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardized Specifications for Civil Engineering Works.
 - b) Mechanical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Refrigeration, Air-Conditioning and Ventilation Installations, published by the South African Association of Quantity Surveyors, July 1990).
 - c) electrical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
- 2. The agreement is based on the General Conditions of Contract for Construction Works, prepared by the South African Institution of Electrical Engineering, 2010, 2nd Edition. The additions, deletions and alterations to the General Conditions of Contract for Construction Works as well as the contract specific variables are as stated in the Contract Data. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.
- 3. Preliminary and general requirements are based on the various parts of SANS 1921, Construction and management requirements for works contracts. The additions, deletions and alterations to the various parts of SANS 1921 as well as the contract specific variables are as stated in the Specification Data in the Scope of Work. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.
- 4. It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards).
- 5. Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
- 6. The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminary and General) of the Bills of Quantities.
- 7. All activities must be invoiced on a monthly basis.
- 8. The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.
- 9. Payment will be based on the completion of activities and approval by CoM Technical officials, also provided that reasonable progress towards the completion of the activity within the estimated budget is demonstrated.
- 10. For the purposes of this Schedule of Activities, the following words shall have the meaning hereby assigned to them:

Unit : The unit of measurement for each item of Service provided as defined in the Standardized, Project or Particular Specifications.

Bid No.: 1492019 Page 51 of 81

Quantity: the number of units of work.

Rate : The payment per unit of work/provision of services at which the Bidder

bids to the work.

Amount : The quantity of an item multiplied by the Bided rate of the (same) item.

Sum : An amount Bided for an item, the extent of which is described in the

Schedule of activities, the scope of works or elsewhere, but of which the

quantity of work is not measured in units.

Provisional Sum (PS) : An amount allowed for in the Pricing Schedule for which the quantity of work

is not known.

Prime Cost (PC) : Is a specific type of Provisional Sum where payment is made on the

production of invoices showing the cost price of the implementation or installation of the service required. Services rendered in this manner carry a mark-up for which a rate is offered at tender stage to cover all the tenderer's handling, supervision and liability costs in providing the item or

services.

Lump Sum (LS) : An amount tendered for an item, the extent of which is described in the

Pricing Schedule, the Scope of Work or elsewhere, but of which the quantity

of work is not measured in units.

11. The budget allocated to each activity and the total of prices for the activities shall not be exceeded without the written consent of the Employer.

- 12. The appointed service provider may only commence with Phase 2 & 3 of the project in accordance with C.3.5 below: PROJECT PHASING & TARGETS, on the following conditions:
 - i. The required budget for the completion of the project has been confirmed in writing to the service provider.
 - ii. The service provider has been given a written instruction to continue with Phase next phase
- 13. The quantities provided by the Employer in the Pricing Schedule are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the Pricing Schedule, will be used to determine payments to the subservice provider.

The quantities tendered by the subservice provider will be certified for payment as final quantities.

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

- 14. Rates and lump sums shall include full compensation for overheads, profits, incidentals, tax (other than VAT), etc, and for the completed items of work as specified in the Scope of Works and for all the risks, obligations and responsibilities specified in the General Conditions of Contract, Particular or Special Conditions of Contract, except in so far as the quantities given in the Pricing Schedule are only approximate.
- 15. The tenderer shall fill in a quantity or a rate or a lump sum for each item where provision is made. Items against which no rate or lump sum has been entered in the tender will not be paid for when the work is executed, as payment for such work will be regarded as being covered by other rates or lump sums in the Pricing Schedule.
- 16. The tenderer shall fill in a rate against all items where the words "rate only" appears in the amount column. Although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item actually be required.

Bid No.: 1492019 Page 52 of 81

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

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

- 17. The short descriptions of the payment items in the Pricing Schedule are only given to identify the items and to provide specific details. Reference shall be made to the Scope of Works for more detailed information regarding the extent of work entailed under each item.
- 18. Prices or rates will be subject to adjustment for escalation as provided for below:
 - The prices or rates shall be fixed for the first 12-month period determined from the tender base date and no change during this period will be allowed for escalation.
 - On the 12-month anniversary date of the Contract base date the rates or sums shall be adjusted by the twelve-month year on year CPI index (as published in the monthly bulletin PO141. of Statistics South Africa under table B) and fixed at this value for the following 12-month period. Subsequent 12-month periods shall be dealt with on the same basis.
 - Adjustment of lump sum prices for escalation shall only be applicable to that portion of the relevant Service which is incomplete at the end of the 12-month anniversary date and shall not be applicable to any progress payments already claimed.
 - Adjustment for escalation shall only be applicable for services or portions thereof, that are still within the prescribed programme and any approved extensions of time.
 - The bidder shall offer supporting documentation to the Municipality to justify any price adjustment that might be required. The price adjustment phase will only be valid during the first month of each financial year.
- 19. Interim payments for lump sum payment items may be permitted. Such interim payments shall however be limited to proven progress achieved for that particular service deliverable. The sum of any progress payments made under a particular lump sum payment item shall be deducted prior to calculating any adjustments for escalation as described in clause C2.1.6 above.
- 20. Provisional and Prime Cost Sums: Each Sum shall only be used, in whole or in part, in accordance with the Employer's instructions and the Contract Price shall be adjusted accordingly. The total sum paid to the subservice provider shall include only such amounts, for the work, supplies or services to which the Sum relates, as the Employer shall have instructed.

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

- The actual amounts paid (or due to be paid) by the subservice provider, and
- A sum for compilation and printing of procurement documentation, quotation/tender process and evaluation, and all overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate tendered in the Pricing Schedule, provided that for Prime Cost sums only, the tendered rate excludes profit.

The subservice provider shall produce all quotations, invoices, vouchers and accounts or receipts in substantiation of any claim under a sum.

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

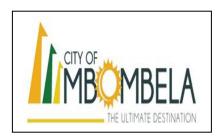
21. The rates and lump sums filled in by the tenderer in the pricing schedule shall be final and binding with regard to submitting the tender, and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the tender. Should there be any discrepancies between the tender sum and the correctly extended and totalled Pricing Schedule, the rates will be regarded as being correct, and the Employer shall have the right to make adjustments to the tender sum to reconcile

Bid No.: 1492019 Page 53 of 81

the tender sum with the total of the Pricing Schedule. In such an event the tenderer will be consulted but, failing agreement between the parties, the decision of the Employer shall be final and binding. Adjustment of the tender sum will take place prior to the signing of the contract. In their own interest tenderers must make doubly sure of the correctness of their tendered rates, the extensions and the tender sum.

- 22. A tender may be deemed unresponsive if the unit rates or lump sums for some of the items in the Pricing Schedule are, in the opinion of the Employer, unreasonable or out of proportion, and if the tenderer fails, within a period of seven (7) days of having been notified in writing by the Employer to adjust the unit rates or lump sums for such items, to make such adjustments.
- 23. All rates and sums of money quoted in the Pricing Schedule shall be in South African Rand and whole cents
- 24. Item numbers appearing in the Pricing Schedule refer to the corresponding item numbers in the Scope of Work.

Bid No.: 1492019 Page 54 of 81



CITY OF MBOMBELA

149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

Part C2.2: Pricing Schedule

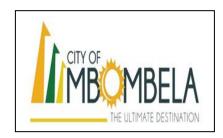
Item	Description	Unit	Qty	Rates	Total
Α					
1	Site Establishment				
1.1	Site Camp Establishment, Store, Rental, Transport, Clearing of Site, Site Supervision, Induction,	per contract	3		
2	Preliminary and Generals				
2.1	Induction and Medical – Foundation Crew	per contract	3		
2.2	Induction and Medical – Mast installation Crew	per contract	3		
2.3	Preparation and submission of a construction program to the Engineer as required in the documents.	per contract	3		
2.4	Three sets construction drawings to the Engineer for approval.	per contract	3		
2.5	Three sets of hard copies and an electronic copy of "As-built" drawings and test certificates to the Engineer on hand-over.	per contract	3		
2.6	Instructions to maintenance staff of operating and maintenance procedures, including three sets of Instruction manuals.	per contract	3		
2.7	Inspection and Commissioning.	per contract	3		
2.8	Compliance with the requirements of the Occupational Health and Safety Plan and regulations.	per contract	3		
2.9	Crane for erection and lifting of mast.	per contract	50		
Sub-T	otal A: Site Establishment & Preliminary and General				
В					
3	Tests				
3.1	Soil geotechnical studies for foundation including soil and concrete cube tests.	per pole	50		
3.2	Perform soil bearing pressure tests for each mast prior to casting the concrete base to ensure that the soil load bearing conditions are suited to the specific concrete base design. Provide soil test Certificate	Per Pole	50		
3.3	Test earth system and provide test certificate	Per Pole	50		

Bid No.: 1492019 Page 55 of 81

Sub-T	otal B: Tests			
С	Foundations			
4	Concrete foundation for high mast complete with excavation, steel reinforcing, cables inlet pipes, earth spikes, foundation bolts and template set, back fill material, soil and concrete test, etc. in the following soil conditions,			
4.1	Soil ("Normal")	m3	Rate only	
4.2	Soft rock ("Difficult")	m3	Rate only	
4.3	Hard rock ("Hard")	m3	Rate only	
4.4	Disposal of surplus unsuitable material at an approved site	m ³	Rate only	
4.5	Additional G4 Material incorporated + Labour	m3	Rate only	
4.5	Concrete Foundations Comprising of STD foundation as per OEM specification	per pole	50	
Sub-T	otal C: Foundations			
D	High Mast and Luminaries			
5.1	Manufacture high mast pole (payment subject to inspection by Engineer)	per pole	50	
5.2	Supply and deliver to site in City of Mbombela complete high mast pole, with all accessories, distribution board, internal cables, carriage, etc.	per pole	50	
5.3	Assemble and Erect complete mast, with all accessories, distribution board, internal cables, carriage, etc.	per pole	50	
5.4	Supply and deliver 200W LED high mast luminaires, or similar, as a replacement to the traditional 400W HPS floodlights.	per pole	50	
5.5	Install and connect 200W LED highmast luminaires. 8 per highmast, including all brackets, etc. Mounted on high mast carriage.	per pole	50	
5.6	Set luminaire aiming positions at each mast and test illumination levels and submit test results to Engineer	per pole	50	
5.7	5m Test lead for testing floodlight luminaires at ground level	per pole	50	
5.8	30 m Sectional Poles 3-rope hoisting Highlight mast with light brackets	per pole	50	
5.9	Internal fiberglass DB with photo cell, Splitterbox and 5c x 2.5mm trailing cable	per pole	50	

	Sub-Total D: High Mast and Luminar				
E					
6	LV Supply and Earthing				
6.1	Provisional Amount for Electrical connection to Municipal supplied point or Eskom point: (16kVA Trfr, Complete Trfr Connection Box, 3 phase Meter and 150m of 16mm2 4 core Cu supply cable)	Sum	1	R1,500,000.00	R1,500,000.00
6.2	Eskom connection application fees	per pole	50		
6.3	Earthing: complete as per specifications, Installation of complete Earthing System as per specification	per pole	50		
Sub-	Total E: LV Supply and Earthing				
F					
7	Accessories				
7.1	Hoisting unit (Single Drum winch)	per contract	1		
7.2	Hydraulic power tool with remote	per contract	1		
7.3	Test Lead (5Pin, 16A, 8m long)	per contract	1		
Sub-	Sub-Total F: Accessories				
G					
8	8 Professional services				
8.1	Provisional Amount for Design, Project Management and reporting to Cogta and to COM PIU according to ECSA rates.	1	1	R1,750,000.00	R1,750,000.00
Sub	-Total F: Professional services			R1,750,000.00	

SUMMARY OF SCHEDULES	
Subtotal - Schedule A – Preliminary & General	
Subtotal - Schedule B – Test	
Subtotal - Schedule C – Foundations	
Subtotal - Schedule D – High Mast and Luminaries	
Subtotal - Schedule E – LV Supply and Earthing	
Subtotal - Schedule F – Accessories	
Subtotal - Schedule G – Provisional Amount for Professional Fees	R1,750,000.00
SUBTOTAL	
10% Contingencies	
SUBTOTAL	
15% Vat	
TOTAL (Carried forward to Form of offer)	



CITY OF MBOMBELA

149/2019

APPOINTMENT OF ELECTRICAL CONTRACTORS FOR SUPPLY, DELIVERY AND INSTALLATION OF HIGH MAST LIGHTING FOR A THREE -YEAR PERIOD IF AND WHEN REQUIRED IN THE CENTRAL REGION

Part C3: Scope of Work

1. Project Description

1.1. Overview of the Works

This contract includes the design, supply, delivery to site, off-loading, erection, installation, commissioning, testing, and handing over in full working order a high mast lighting structure, including floodlight luminaries, in George on an "as and when" basis for a period of three (3) years. This tender will be dependent on the availability of funds.

Tenderers must allow for all items, whether specified or not, required to complete the installation. Over and above all the items listed in Section 1.2 and Section 1.3, the Contractor's Scope of Work will specifically include the following:

- 1. Geotechnical studies of proposed sites and issuing of soil test results.
- 2. Design, preparation and cast of appropriate foundations.
- 3. Design, supply, delivery to site, off-loading, erection, installation, commissioning, testing, and handing over in full working order a 30 meter high mast pole complete with Luminaries and control panel as specified.
- 4. Perform an electrical connection to the installation from the Municipal Supply Point, which will be supplied by CITY OF MBOMBELA or ESKOM to the base of the base of the pole.
- 5. Test and commissioning of the high mast lighting installation.
- 6. 6. Issuing of a certificate of compliance (COC) in terms of SANS 0142 Code of Practice.
- 7. CITY OF MBOMBELA or ESKOM to supply the electrical connection point to the base of the pole.

Bid No.: 1492019 Page 58 of 81

1.2. Scope of contract

This contract is envisaged to be a standard EPC project. The Contractor shall perform all work and furnish labour, equipment and materials, construction plant, temporary works (including site welfare and temporary supplies), equipment, auxiliaries and accessories, special tools, spare parts and performing all operations and work required for the design, engineering, material selection, manufacturing, inspection and testing at the Vendor's or his Sub-vendor's Works, delivery at site including packing, forwarding, loading, transportation to site, custom clearance as required, transit insurance, unloading, storage at site, preservation, transportation from site-store to construction site, erection, finishing, painting, testing commissioning, performance guarantee tests with all materials, tools, tackles, handling equipment, testing equipment/kits and putting into successful commercial operation complete with standard accessories/attachments as per the relevant technical Specifications, particular equipment specifications, data sheets, relevant codes and practices, which are described in the sections below, as well as applicable statutes, regulations and safety codes of Local Statutory authorities. In case of any conflicts between these requirements the Contractor shall refer to the Engineer for clarification. Material, designs, labour and devices, which are normally part of the contractor's scope of supply, essential for the proper supply, installation and operation of all equipment or are necessary for the proper functioning of the whole installation, shall be supplied/included even if not explicitly called for in this Specification at no additional cost to the Employer. Specifically related to execution the Contractor must note the following:

1. The contractor shall perform all work in accordance with this Tender package. In case of any conflicts between this Tender package and any of CITY OF MBOMBELA standards and/or the Local Statutory authorities' regulations and safety codes, the Contractor shall refer to the *Engineer* for clarification.

In line with these requirements, the Contractor will be responsible for all relevant Plans, Working Methodologies and Registers, which will include, but not be limited to:

- 1. The Contractor is responsible for the development of Method Statements for all works to be accepted by the *Engineer*.
- 2. The Contractor must provide to the *Engineer* a list of all material to be used and the suppliers from which these materials have been procured including internal and external labelling. Labelling quality must be agreed to during the design stage.
- 3. The Contractor must provide to the *Engineer* a detailed construction programme and Construction Management plan, clearly indicating all quality control hold points for the relevant stakeholders to do inspections.
- 4. The Contractor must schedule a site construction kick-off meeting and ensure CITY OF MBOMBELA representatives (*Engineer* and Site Supervisor/Clerk of Works) are present.
- 5. The Contractor is responsible for safety checks and acceptance, and the development of a Health & Safety Plan, including all risk registers to be accepted by the *Engineer*.
- 6. The Contractor is responsible for the development of a Quality Control Plan to be accepted by the *Engineer*. The Contractor must comply with the Quality Control Plan.
- 7. The Contractor is responsible for ensuring compliance to Construction Regulations.

Bid No.: 1492019 Page 59 of 81

- 8. The Contractor is responsible for the development of an Environmental Management Plan to be accepted by the *Engineer*. The Contractor must comply with the Environmental Management Plan. The Contractor must serve all notices and pay all fees due in terms of the Environmental laws and regulations.
- 9. The Contractor is responsible for submission of three sets of as-built drawings after construction.

1.3. Complete Engineering of Works

It will be the responsibility of the Contractor to prepare and provide all the designs for the works to comply with the Employer's design requirements. This will consist of all: Detailed Designs and Engineering and Construction Designs. The calculations and drawings, for each element of the Works, must be submitted to the Engineer for their review and approval, prior to the Procurement and/or Construction of any work. This will be at no additional cost to the project or the Client. The Complete Engineering Works will include all, but not limited to, geotechnical, civil, structural, mechanical and electrical aspects. Immediately after the starting date, the Contractor shall start with the design of the works and the equipment.

During this design phase of the contract the Contractor is required to hold design review meetings to confirm all Employer requirements and to obtain the *Engineer's* acceptance for all design concepts, design interfaces and specifications to ensure that quality is designed into the final product. Structural and component design shall be verified and signed by the Contractor's *Professional Engineer*.

If required by the Employer, the services of an independent third party will be engaged by the Employer to review the Contractor's design and the Contractor must give the necessary co-operation and supply all the necessary design data as required. The cost of the design review by the third party will be borne by the Employer. All shop drawings to be presented, discussed and confirmed with the *Engineer* prior to manufacture. Time required for all the activities associated with the design of the equipment must be allowed for and indicated by the *Contractor* in his programme.

2. Program and Completion

2.1. Tender Period

The intension of this Tender is to award a Contract for a 3 year period from the date of appointment. Tenderers are required to supply and install high mast lighting structures on "an as and when" required basis per the availability of funds. Tenderers must state in the schedules the completion period for a project in weeks from date of official purchase order until the date of complete supply, installation and erection of the mast. The delivery period for any additional sundry items procured for the project will run concurrently with the installation project.

Bid No.: 1492019 Page 60 of 81

2.2. Construction Program

The Contractor will be required to develop and maintain for the full duration of the contract, a works programme whose purpose will be to ensure that the work is carried out and controlled in such a way that the contract is completed within the time stated in the tender or in the time extended by the Engineer in writing. The Contractor shall take all aspects regarding the conditions on site, access, transportation, restricted working space, the availability of material, machines and labour into account during the tender stage and the compiling of a construction programme.

The Contractor is to submit his programme of works to the Engineer not later than 14 days after the Contractor has been provided with an order. The programme is subject to the Engineers approval and remains so for the duration of the contract. Should it be required, the Engineer may instruct the Contractor to adjust his programme accordingly to suit other activities. The programme submitted by the contractor shall make provision for forecasted quantities of work to be performed each week, together with plant used and cash flow for each activity. Should the abovementioned programme fall behind schedule, or the sequence of operations is altered, or if the programme is deviated from in any other way, the contractor shall, within two days after being notified by the Engineer, submit a revised programme.

Should the programme require to be revised due to the contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time to ensure completion of the Works within the time for completion as defined in the General Conditions of Contract or within any granted extension of time. Any proposal to increase the tempo of work must be accompanied by providing more labour and plant on Site, or by using the available labour and plant in a more efficient manner. Failure on the part of the Contractor to submit the agreed deliverables according to the programme or revised programmes shall be sufficient reason for the Engineer to take steps as provided for in the General Conditions of Contract.

The approval by the Engineer of any programme shall have no contractual bearing apart from the requirement that the Contractor undertakes to carry out the work in accordance with the programme to the satisfaction of the Engineer. It shall not limit the right of the Engineer to instruct the Contractor to vary the programme should circumstances make this necessary.

Bid No.: 1492019 Page 61 of 81

3. SERVICE CONDITIONS

3.1. Site Conditions

All components must be designed for at least the site conditions stated in Table 1. More onerous requirements may be specified for individual components, but otherwise these minimum requirements apply. The specific sites for the high masts must still be determined by Council. Tenderers must allow for all conditions on site in their tenders, since extra claims arising from difficult site conditions in respect of transport, handling, loading, off-loading, labour, housing, etc.; will not be entertained.

TABLE 1: SITE OPERATING CONDITIONS.

Description	Unit	Value	
Altitude above mean sea level	M	200	
Maximum ambient temperature for design purposes	°C	45	
Average ambient temperature for design purposes	°C	25	
Minimum ambient temperature for design purposes	°C	-5	
Maximum average humidity	%	95	
Maximum 3 second wind gust velocity	m/s	44	
Earthquake loading for design purpose	magnitude	6	
Mean annual rain fall	mm	700	
Lightning flash density	Flashes/km ² /annual	2	
Level of atmospheric pollution	Heavy (coastal)		

Bid No.: 1492019 Page 62 of 81

3.2. Geotechnical Conditions

A geotechnical investigation has not been performed previously. It will be the responsibility of the Contractor to perform geotechnical studies of the various installation sites.

4. Inspections and Tests

4.1. General

During manufacture and prior to despatch, the Engineer will inspect all poles at the Manufacturer's works. Each pole must be subjected to the tests specified below by the Contractor in the presence of the Engineer and to such tests as may deemed necessary by the Engineer to ensure good quality workmanship. All tests performed shall be at the expense of the Manufacturer. Not less than ten (10) working days notice in writing shall be given to the Engineer detailing when the poles will be ready for inspection and tests. Unless the Engineer shall otherwise direct, no poles shall be delivered unless the Engineer has issued to the Contractor, in respect of such poles, a certificate in the form of a release note certifying that the poles have passed the tests required and are therefore released for delivery.

4.2. Galvanising test

The quality of the galvanising shall be tested in accordance with SANS 121.

4.3. Welding test

If transverse butt-welds are to be used, the poles shall be subjected, at each joint, to a bending load which causes the butt-weld (half circumference) to be under tension. The load shall be varied according to the section and shall not cause permanent set. The load (or the amount of deflection produced) shall be to the satisfaction of the Engineer and sufficient to ensure that each butt-weld is of adequate strength. The Engineer shall witness as many of these tests as he may deem necessary, preferably during the course of manufacture. The manufacturer shall give adequate notice, to permit the Engineer to attend the inspections. Any joint where cracking occurs shall be ground out to the full thickness of the material, re-welded and tested again.

5. Quality System

The Contractor's quality assurance system shall be approved in terms of SANS 9001 or an alternative quality assurance system to the approval of the Engineer. A copy of the registration certificate shall be submitted with the tender.

Bid No.: 1492019 Page 63 of 81

6. DAMAGE TO OTHER SERVICES

The Contractor shall assume full responsibility in the event where he or any person in his service is directly or indirectly responsible for any damages caused to other services already installed (water, sewerage, storm water, roads, surveyors' pegs, etc.) Any such damage shall immediately be reported to the Engineer. The Contractor shall be held fully responsible for the repair of such damage to the satisfaction of the Engineer. The costs for the repair of such damage shall be borne by the Contractor. Claims by the Contractor in this connection will be not be considered. Should any portion of the works in terms of this Contract, for which the Contractor is responsible, be damaged by other Contractors, the Contractor shall repair such damage at the tendered rate and shall submit full details of such damage to the Engineer so that he can recover such costs from the responsible party. This repair work may only be done on the written instruction from the Engineer. The contractor shall make provision for a full scan of the area to determine the position of services in the area.

7. LOCAL LABOURAND LOCAL AUTHORITIES

7.1. Local Labour

It is intended that the project must make maximum possible use of local labour which is presently unemployed in the area of which the project is performed. All unskilled labour shall be from George Municipal Supply area. Engagement of local labour shall be controlled in a formal manner through the client's labour liaison body. It is furthermore expected that the labour liaison body will assist in the monitoring of labour goals.

7.2. Liaison with Local Authorities

The contractor will have to liaise with local authorities regarding the following matters:

- 1. Dealing with traffic.
- 2. Locating of existing underground services.
- 3. Protection of existing services during construction.

It is the contractor's onus to immediately contact all these authorities and to accommodate their involvement in his programme of work. The contractor should also warn the authorities at least 48 hours before the actual work commence. Compensation for delays, losses or accidents will not be considered should the contractor at any time have failed to keep the local authorities informed. The engineer or employer must immediately be notified, should the contractor experience any problem regarding work, which involves a local authority.

7.3. Community Liaison and Community Relations

In all dealings with the community and workers employed from within the community, the Contractor shall take due cognisance of the character, culture and circumstances of the community 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 project. The Contractor shall at all times, keep the Engineer fully informed on all matters

Bid No.: 1492019 Page 64 of 81

affecting the contractor and the community, and shall attend all community meetings relating to the project as may be reasonably required by the Engineer. All matters concerning the community shall be discussed and where possible, resolved at such meetings. Where any resolution of a community meeting shall be contrary to the terms and provisions of the Contract, the Contractor shall not give effect thereto 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 the incurring of additional costs which were not provided for in his tendered rates and/or that a delay in the progress of the works will result, he shall be entitled to submit a claim in terms of Clause 48 of the conditions of contract, provided always that the period of twenty-eight (28) days referred to in Clause 48 shall be reduced to three (3) normal working days in respect of all claims submitted in terms of this clause.

8. CREW

A competent supervisor must be on site at all times to supervise the work undertaken by the crew. The work crew shall comprise at least the following:

- 1. A Rigger (Certificate to be submitted).
- 2. Installation Electrician.
- 3. Responsible person in terms of NRS 040.
- 4. Labourers.

9. OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993)

Contractors shall meet the health and safety requirements as stipulated in health and safety plan.

9.1. Safety Precautions

Notwithstanding the fact that the Contractor is solely responsible for the actions of his staff and any duly appointed sub-contractors, the Engineer reserves the right for himself, or his nominated representative, to inspect and monitor working methods and materials handling to ensure that safe working practices are being adhered to at all times.

9.2. Health and Safety Specifications

Please refer to Annexure A in Part C.4 for the Health and Safety Specification.

10. PARTICULARS

The following information must be submitted with the Tender:

- 1. Full technical design drawings and specification details of the equipment offered in respect of each item tendered. The information must be submitted with the tender documents, failing which, the offer will be deemed non-responsive.
- Computer simulations for the flood light luminaires on electronic media in a form compatible with the Dailux Lighting computer program. The

Bid No.: 1492019 Page 65 of 81

- information shall have been approved by the South African Bureau of Standards (SABS) or the CIE.
- 3. The location of and the manufacturing facilities of the Tenderer.
- 4. The number of similar high mast lighting poles in actual service in South Africa.
- 5. The names of previous purchasers of high mast lighting poles offered and in service.
- 6. Samples of flood light luminaires offered within 5 working days of being requested to do so.
- 7. A copy of the manufacturer's Certificate of Listing in terms of SANS 9001.
- 8. Design calculations signed and certified by a Professional Structural Engineer to be submitted if requested.
- 9. Certificate of the Professional Structural Engineer to be submitted within 3 days of request if requested.
- 10. Proof of qualifications of all construction staff to be engaged in contract work.

The Contractor shall, prior to commencement of any work:

- 1. Appoint a competent person to sign and submit the "Memorandum of Agreement".
- 2. Supply proof of public liability insurance to indemnify the Municipality from public liability claims up to R5 million per incident. (See Clause 8.3 of Special Conditions of Contract).
- 3. Provide the Engineer with a list of cellphone numbers of his staff required to be contactable.

11. APPOINTMENT OF CONTRACTOR

The CITY OF MBOMBELA intends appointing a Main Contractor and in addition reserves the right to accept an Alternative Contractor, i.e. a different Manufacturer. Also, should the Main Contractor not be on site with a reasonable workforce within 2 week of date of official purchase order or, in the instance of purchase orders relating to goods only, fails to deliver within the specified delivery period, the purchase order will be cancelled and placed with the Alternative Contractor.

C3.2 STANDARDS

The following documents contain provisions that, whether referenced in the text or not, constitute requirements of this specification. Note that the National equivalent of IEC standards are generally the same but may include specific variations to be taken into account. Information on currently valid national and international standards can be obtained from the South African Bureau of Standards.

Bid No.: 1492019 Page 66 of 81

SANS 121	_	Hot dip Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods
SANS 857-1	-	Defines metal welding processes and related terms
SANS 920	_	Steel bars for concrete reinforcement
0,110 020		Standardized specification for civil engineering
SANS 1200 A	_	construction Section A: General
		Standardized specification for civil engineering
SANS 1200 AA	-	construction Section AA: General
		Standardized specification for civil engineering
SANS 1200 G	-	construction Section G: Concrete (Structural)
		Standardized specification for civil engineering
+6SANS 1200 GA	_	construction Section GA: Concrete (small works)
		Standardized specification for civil engineering
SANS 1200 H	-	construction Section H: Structural steelwork
		Standardized specification for civil engineering
		construction Section HC: Corrosion protection of
SANS 1200 HC	-	structural steelwork
SANS 1700-14.1/11	-	Fasteners Part 14: Hexagon nuts Sections 1 to 11
SANS 2394	-	General principles on reliability for structures
SANS 9001	_	Quality management systems - Requirements
		Welding and allied processes - Recommendations for
		joint preparation Part 1: Manual metal-arc welding, gas-
		shielded metal-arc welding, gas welding, TIG welding
SANS 9692-1	-	and beam welding of steels
SANS 10142-1	-	The wiring of premises Part 1: Low-voltage installations
SANS 10144	-	Detailing of steel reinforcement for concrete
SANS 10145	-	Concrete masonry construction
		Basis of structural design and actions for buildings and
SANS 10160-1	-	industrial structures Part 1: Basis of structural design
		Basis of structural design and actions for buildings and
		industrial structures Part 2: Self-weight and imposed
SANS 10160-2	-	loads
0.000.000.00		Basis of structural design and actions for buildings and
SANS 10160-3	-	industrial structures Part 3: Wind actions
04104044		The structural use of steel Part 1: Limit-state design of
SANS 10162-1	<u> </u>	hot-rolled steelwork
SANS 10162 2		The structural use of steel Part 2: Limit-states design of cold-formed Steelwork
SANS 10162-2	-	
SANS 10162-4		Structural use of steel Part 4: The design of cold- formed stainless steel structural members
UANU 10102-4	-	The structural use of masonry Part 2: Structural design
		and requirements for reinforced and pre-stressed
SANS 10164-2	_	masonry
SANS 10225	_	The design and construction of lighting masts
		Protection against lightning – Physical damage to
SANS 10313	_	structures and life hazard
		Exterior lighting Part 1: Artificial lighting of exterior
SANS 10389-1	_	areas for work and Safety
		•

SANS 10389-1 -areas for work and Sa Bid No.: 1492019 Page 67 of 81

	Exterior lighting Part 3: Guide on the limitation of the
	effects of obtrusive light from outdoor lighting
SANS 10389-3	-installations
C7 (14C 10003 0	Protection against corrosion of iron and steel in
SANS 14713	-structures – Zinc and aluminium coatings – Guidelines
	Specification and qualification of welding procedures for
SANS 15607	-metallic materials General rules
	Specification and qualification of welding procedures for
	metallic materials Welding procedure specification Part
SANS 15609-1	-1: Arc welding
	Specification and qualification of welding procedures for
0.110.45000.0	metallic materials Welding procedure specification Part
SANS 15609-2	-2: Gas welding
	Specification and qualification of welding procedures for
SANS 15609-3	metallic materials Welding procedure specification Part -3: Electron beam welding
SANS 13009-3	Specification and qualification of welding procedures for
	metallic materials Welding procedure specification Part
SANS 15609-5	-5: Resistance welding procedures
	Specification and qualification of welding procedures for
	metallic materials Welding procedure test Part 1: Arc
	and gas welding of steels and arc welding of nickel and
SANS 15614-1	-nickel alloys
	Welding - Welding of reinforcing steel Part 1: Load-
SANS 17660-1	-bearing welded joints
04110 47000 0	Welding - Welding of reinforcing steel Part 2: Non-load-
SANS 17660-2	-bearing welded Joints
SANS 50025	-Hot rolled products of structural steels
	Guidelines for quality management system
SANS 60439-3	- documentation
AWS D1.1	-Structural Welding Code – Steel
SANS 1091	-National Colour Standard
SANS 1250	-Capacitors
SANS 1266	-Ballasts
SANS 475	-Luminaires: Performance requirements
	Degrees of Protection provided by Enclosures (IP
SANS 60529	-Code)
SANS 60598-1	-Luminaires: Part 1. General Requirements and Tests
	Luminaires: Part 2-3. Particular requirements – F
SANS 60598-2-5	-loodlights
SANS 60662	-High Pressure Sodium Vapour Lamps
SANS 60923	-Auxiliaries for Lamps (Ballasts)
SANS 60927	-Auxiliaries for Lamps (Starting Devices)
SANS 61048	-Auxiliaries for Lamps (Capacitors)
SANS 61049	-Capacitors (Performance requirements)

Bid No.: 1492019 Page 68 of 81

	Lamp Control Gear: Part 1. General and Safety
SANS 61347	-requirements
	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and
SANS 215	-similar equipment
SANS VC 8011	-Lampholders
	Guidelines for the installation and maintenance of street
ARP 035	-lighting

Reference to a particular standard or recommendation in this specification does not relieve the manufacturer of the necessity of the work complying with other relevant standards or recommendations. Tenderers offering equipment to standards other than those mentioned above may be considered provided it is clearly indicated in which respects the equipment offered does not comply and the likely consequences of such non-compliance

C3.3 TECHNICAL SPECIFICATION

1. Mast

1.1. Design

The masts must be designed in accordance with SANS 10225. The design, including calculation details, shall be submitted for approval to the Engineer before commencing manufacture. The relevant structural documents must be signed by a Professional Structural Engineer and the technical design calculations and specification shall be submitted with the tender document. The high mast structures must be designed to withstand a maximum 3 second wind gust velocity of 44 m/s measured at a height of 10 m above ground level and acting on a projected area of the mast, masthead frame and luminaries allowing for the increase in wind speed with height as given in SANS 10160 & SANS 10225.

The fully equipped mast must be designed for terrain category 2.5 and for a lifespan of 50 years. The deflection of the mast top shall not exceed 2,5% of the mast height when subjected to two thirds of the maximum wind velocity. The masts must be designed so that wind excited oscillations shall be dampened as much as practically possible and allowance made for the stresses due to these oscillations. The manner in which this is to be achieved shall be clearly stated in the design calculations. The axis of the mast when erected shall not deviate from the vertical by more than 0,3% of the height above the base flange nor from straightness by more than 0,3% of any length, measured at the centre of that length unless the mast is explicitly so designed. The mast shall carry at its top the Floodlights evenly around its circumference. Data on wind induced oscillations and the dynamic behaviour of the mast shall be submitted.

1.2. Construction

Masts and mast bases must be manufactured of Grade S355J0 steel plate complying with the requirements of SANS 50025. All welding shall comply with SANS 10225 1991-1 specifications. Welding Procedure Specification and shall only be carried out by coded

Bid No.: 1492019 Page 69 of 81

welders, tested according to the AWS specification. Proof of the relevant Welding Procedure Specification and Welding Qualification documents must be submitted on request. Inspection and acceptance certificates shall be furnished on request. Any openings in the mast must be reinforced sufficiently in order not to weaken the structure. Each mast must be constructed to form an evenly tapered totally enclosed hollow shaft with a steel base section. The masts must be delivered to site in sections and joined on site. A method statement must be submitted to the Engineer detailing the on-site assembly of the mast. Bolted or welded section joints will not be permitted i.e. site slip joints must be used to enable the erection of the masts. The base section must be designed for mounting on a concrete plinth and must be fixed in position with bolts, nuts and washers of adequate dimensions. For added security, gussets must be welded onto the base between mounting holes. This must be done before galvanizing.

1.3. Access Opening

An access hole with a hinged flush fitting weatherproof cover must be provided in the base of the mast, with the bottom lintel 600mm above the base plate, for easy access to the electrical distribution board ancillary equipment and the quick and safe attachment of the portable winch to mast and hoisting ropes. The door shall be adequately protected against vandalism and secured by three screws requiring a special opening tool, or alternative as agreed with Engineer. The opening perimeter must be reinforced to restore the section modules of the mast shaft and have a curved top and bottom to prevent stress concentrations. The door opening and closing mechanism shall correspond to similar masts in use by CITY OF MBOMBELA. The mounting strips welded opposite the door opening shall be drilled for the mounting of a control board. Earth terminals, as well as a support bar for the incoming supply cables, shall be provided below the door opening.

1.4. UV Protected fibre glass canopy

Each mast shall have an UV protected fibre class canopy that will cover all electrical material on top of the mast against UV light. This will be of adequate design to match with the mast and reducing the wind load that is applied to the mast.

1.5. Raising and Lowering Device

Each mast shall be equipped with a three-point hoisting mechanism, consisting of three 6mm diameter suspension ropes of stainless steel 7/19 construction, running over three pairs of Aluminium pulleys on the head frame of the mast running on shafts manufactured from Stainless steel. The complete pulley assembly must be enclosed with a corrosion proof top cover, fixed with a bolt incorporating a lightning arrester, to prevent ingress of water all split pins, bolts, nuts and washers shall be of stainless steel. Pulley shafts shall be positively prevented from rotating in their housings. **Two Rope systems shall not be considered.**

The luminaire carriage shall be drawn against three inverted cones to ensure level positioning of the fittings in the operating position. The hoisting ropes, which will remain under tension at all times, shall terminate inside the mast on a clevis plate, to which the rope of the hoisting unit can be connected or to which, when in the raised position, the locking device can be attached. The locking device shall be secured to a structurally sound member of the mast base. The other ends of the hoisting ropes shall be firmly secured to the luminaire carriage. Rope ends shall not be secured by Crosby clamps and only "Talurit" type ferrules of

Bid No.: 1492019 Page 70 of 81

compatible material shall be used. In addition, a safety chain shall be provided between the clevis plate and a structurally sound member of the mast base. All fasteners connected with the raising and lowering device shall be secured by Nylok type nuts or stainless steel split pins.

The raising and lowering gear must, in complete safety, facilitate the raising and lowering of the floodlight luminaire carriage for maintenance purposes by means of a portable winch. A 12mm diameter earthing stud must be welded to the inside casing of the mast adjacent to the cable termination box. The stud shall be provided with two washers and a nut. The top pulley assembly must have guides and docking stops designed and constructed in such a way that the luminaire ring is always in the same position after raising it to the top of the mast and that jamming of the ring is prevented. One end of the wire rope in the bottom of the mast must be attached to the rope lock bar in such a manner that accidental lowering of the luminaire ring, without the use of the winch, is not possible.

1.6. Hoisting Unit

Provision shall be made at the base of the mast to accommodate a removable type, approved oil bath winch of the Dymot /OM type. The winch shall be of lightweight construction and mounted on a suitable frame for easy transfer from one mast to another, thus not requiring a winch in each mast. It should also, be easily coupled, uncoupled and removable through the door opening provided at the base of the mast. This shall be a single drum worm gear type, self-sustaining at al loads and operating speeds, without the use of brakes and clutches. It shall have a gear ration of at least 50:1 and be suitable for both hand and power operation. The winch shall run in a fully enclosed oil bath.

The winch shall be fitted with a safety device to ensure that the drum is locked positively when the cranking handle or power tool is removed from the drive shaft. The safety device shall be applied automatically. A test certificate, stating the safe working load of the winch and issued by a recognised testing authority, shall be supplied with each winch. Winches shall be fitted with a label and rating plate of a permanent nature in an easily visible position.

1.7. Hydraulic power tool

A Hydraulic power tool is required to drive the single drum winch and must have the following specifications: A 1.5 kilowatt single-phase electrical motor running at 1440 rpm. A Hydraulic motor with variable speed ranging between 214 rpm and 268 rpm with a pump delivery of 5.5 L/ min.

1.8. Corrosion Protection

All steel parts shall be immersed in a heated wash trough to remove all fine foreign particles and lubricants. If sheet steel is used that has not been pre-galvanised, immediately after degreasing, all parts shall be hot dip galvanised in accordance with SANS 121. All welds shall be de-scaled, all machining carried out and all parts shall be adequately cleaned prior to galvanising. The preparation for galvanising and the galvanising itself shall not adversely affect the mechanical properties of the coated material. All articles shall be coated to the thickness detailed in Table 2 of SANS 14713 for corrosive category C5 and very long (≥20 years) typical life to first maintenance. All galvanised material shall be substantially free from white rust when it is erected on site.

Bid No.: 1492019 Page 71 of 81

Close attention shall be paid to the manner in which the material is stacked and stored at the galvaniser's works and also during its subsequent handling.

No welding, drilling, punching or removal of burrs shall be permitted after galvanising. The repair to galvanising damaged by handling or transport shall be done by cleaning the area and applying 2 coats of a zinc rich primer giving a dry film thickness of at least 100 microns and containing at least 94% zinc in the dried film. If in the opinion of the Inspector, damage is excessive, such items will be rejected by the Inspector and shall be replaced by the Contractor at his own expense. A galvaniser's guarantee or test certificate shall be submitted to the Engineer prior to installation.

2. Luminaire Carriage, Electrical Cables, Board and Floodlights

2.1. Luminaire Carriage

The carriages for the 30m masts shall be designed and manufactured from suitably sized and graded channel formed steel considering the weight and the windage area of the number of flood light luminaires and all related equipment and shall accommodate at least the following:

- 3. Nine (8) 300W LED luminaires (or similar) on the 30m masts.
- 4. A suitably sized glass reinforced polymer cable termination box (section 2.4) for the termination of the trailing cable and luminaire supply cables (refer to section 2.2).
- A lighting arresting spike.
- 6. Guides and docking stops suited to those on the top pulley assembly.
- 7. At least four 12mm diameter (after galvanising) holes per luminaire for fixing purposes.
- 8. A 300mm long 4mm stainless steel wire safety leash with fixings shall be provided for each luminaire.

2.2. Electrical Connection to the Luminaires

A flexible, heavy-duty 5-core trailing cable, which runs over a separate set of Aluminium sheaves at the head frame, shall be provided. Sheaves shall be of Aluminium, running on UHDPE shafts. The shafts shall be positively secured from rotating in their housings. The Aluminium sheaves shall be adequately sized to prevent deformation of the cable. The trailing cable shall be firmly connected to the luminaire carriage at its one end and to the clevis plate at the other end. Suitable connectors of the CEE type with an IP44 rating shall be provided.

2.3. Distribution Board

A fully enclosed IP30 distribution board shall be mounted in the access opening in such a manner as to facilitate easy and safe access for maintenance purposes and shall be wired in a neat and workmanlike fashion. The distribution board shall be of adequate dimensions and fitted with a hinged door with lockable catch. The door shall seal onto

Bid No.: 1492019 Page 72 of 81

a neoprene gasket. Suitable vermin proofed ventilation holes shall be provided to prevent moisture build-up in the distribution boards. The following equipment shall be suitably rated for the duty and must be accommodated in the distribution board:

- 2. One (1) x three pole MCB main switch.
- 3. Single pole MCBs for individual luminaire protection. Each circuit breaker must supply only one luminaire.
- 4. One (1) x single phase switched socket outlet for the use of a power tool Means of isolating control cable supply voltage (inside the board)
- 5. One (1) x single phase switched socket outlet for the use of a power tool
- 6. One (1) x 5 pin CEE socket
- 7. One (1) x adequately rated contactor
- 8. One (1) x single pole MCB acting as by-pass switch
- 9. One (1) x single pole MCB protecting the contactor
- 10. One (1) x rated photocell
- 11. The remote control gear (if required).

The following must be noted:

- 1. Contactors, if any, shall be operated electro-mechanically.
- 2. Circuit breakers shall comply with SANS 156 and SANS 1426 with a fault rating not less than 10kA. All circuit breakers must be accessible from the front of the board.
- 3. All equipment in the distribution board shall be mounted behind a removable cover with cut-outs to provide access to the circuit breaker toggle switch.
- 4. All circuits in the distribution board shall be suitably labelled.

The photocell of the National type shall be mounted 4m above ground level on the outside of the mast under a vandal proof cover by means of a special locking device.

A Splitter box with IP65 rating shall be mounted on top of mast, fitted with a test socket of the CEE type with at least IP44 rating at the bottom of the box.

All switchgear in the distribution board must be labelled to indicate the utilisation of the circuits. All labels shall be white "Traffolite" or equal to approval with black engraved numbers. The "Traffolite" labels shall be fitted to purpose made label holders/or screwed. No stick-on embossed tape shall be used.

The distribution board shall be fully wired and ready for connection to the incoming supply cables.

Bid No.: 1492019 Page 73 of 81

2.4. Cable Termination Box

A glass fibre cable termination box mounted in each mast shall be a waterproof enclosure of adequate dimensions. The cable termination box shall be fitted with a lid secured with at least four captive screws. All metal parts of the housing shall be bonded to the main earth.

2.5. Floodlight Luminaires

The luminaries shall be complete with lamp holder(s), lamp(s), internal wiring, control gear as well as any other components and accessories required, to ensure a complete and working light fitting.

The luminaires must comply with SANS 10389, SANS 475, SANS 60598-1 and SANS 60598-2-5. The LED luminaire shall be designed to meet the lighting criteria for 30m high mast lighting, replacing 8 x 400W HPS lights. The luminaire shall be designed in accordance with the following requirements

- 1. Design Life: In excess of 25 years.
- 2. The LED life expectancy shall be at least 60,000 hours (*Documentary* evidence from the LED manufacturer, by means of an appropriate datasheet, shall be provided).
- The luminaires shall have an approved asymmetric luminous intensity distribution suitably controlled internally for a medium and narrow beam distribution.
- 4. Use of high efficiency LED's (*Documentary evidence of compliance to this clause shall be submitted with the tender*).
- 5. The luminaire housing shall be robustly constructed of marine grade high pressure die cast aluminium and shall be weatherproof, hail proof, corrosion proof and vandal resistant. Glass reinforced polyester (GRP) luminaires are not acceptable.
- 6. Surge protection 10kV / 10kA
- 7. A minimum power factor of 0.9
- 8. Hinge pins, clips, clamps, set screws, bolts, nuts and washers shall be manufactured from an appropriate grade of stainless steel and shall be to the approval of the Engineer.
- 9. The front glass to the luminaire lamp enclosure must be manufactured from heat tempered, impact resistant glass with a minimum thickness of 5mm and must be fitted with a silicon gasket seal. Polycarbonate is not acceptable. The front glass shall be fixed at least at the four corners with stainless steel clamps and suitably sized screws to allow for the periodic cleaning and maintenance of the glass.
- 10. Silicon rubber gaskets shall be fitted into a groove in the housing and shall be kept in place such that the integrity of the IP rating is ensured. The gasket shall be screened against harmful radiation from the light source.

Bid No.: 1492019 Page 74 of 81

- 11. An exterior lip shall be provided on the housing to ensure that there is no direct rainwater contact with the gasket between the housing and the diffuser, thus ensuring that no moisture is sucked into the diffuser when the luminaire is switched off and cools down.
- 12. All metal parts of the luminaire must be connected to a suitable earth terminal.
- 13. Connections shall be brought to a suitable heat resistant screw type plug in terminal block using silicone heat resistant wiring. The terminal block shall be securely fixed to the control gear holding plate. The terminal shall be indelibly marked either by means of colour coding or by the letters L, N & E.

The new LED luminaires to be installed shall provide similar or better light output at ground level as 400W HPS floodlights currently in use by CITY OF MBOMBELA with the following requirements (for example the 200W Gigatera MA200):

- 1. Power consumption Max 270W
- 2. LED lumen output min 22,000 lm

The contractor must also price for the supply and delivery of floodlights in the range of 440W to 500W as an alternative to HID 1kW HPS/T floodlight type.

2.6. Degrees of Protection

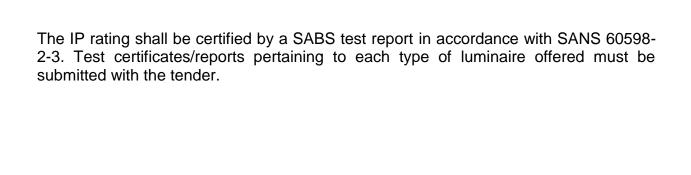
The degree of protection shall comply with SANS 60598-2-3 and the categories shall be:

1. Distribution board: IP 65

2. Lamp compartment: IP 66

3. Control gear compartment: IP 66

Bid No.: 1492019 Page 75 of 81



Bid No.: 1492019 Page 76 of 81

3. Foundations

3.1. Excavations

To account for soil conditions that may vary along an excavation, rates for 3 different types of soil will be used- "Normal", "Difficult" and "Hard". Hard excavation will be measured as "Normal" with the use of necessary compressor and/or other mechanical equipment being measured as an extra over rate. The types of excavation are defined as follows:

Normal Excavation: Material that can be loosened and removed using pick and shovel (such as grass covered sand, soft clay, dry earth, small stones in sand which can be removed by hand, or thin layers of "koffieklip").

Difficult Excavation: Material that is difficult to loosen and remove using pick and shovel such as large layers of "koffieklip", hard dry clay, ground containing boulders and layers of tar or where progress is slow and other services are affected. The cost of any mechanical plant used to assist in loosening the material is to be included in the given rate.

Hard Excavation: A solid mass of material, 1m or longer, that can be broken only using a paving breaker, or jackhammer and/or blasting and where progress is very slow

The Engineer must authorise any difficult or hard excavation before it may be claimed. Excavations must be carried out in a neat and workmanlike fashion. The Contractor must remove tar pieces, stones and sharp objects from the excavated soil and ensure that such material is removed from site daily. No stones, tar pieces or sharp objects may be put back in the trench. No excavations or holes shall be left open for longer than 3 days or over a weekend. Excavated material may not be dumped or stored against boundary walls or on landscaped gardens unless the prior consent of the property owners is obtained. The Contractor shall be responsible for the restoration of defaced property. Where excavated material is placed on road surfaces, care must be taken not to block stormwater drains or open channels.

Where grass sods or plants are removed, they must be neatly packed adjacent to the trench. The Contractor must keep the grass sods or plants damp after removal by watering or otherwise to ensure that they remain alive. The Contractor must ensure that all vegetation is replanted after the trench is properly backfilled and compacted. The Contractor must make good at his own cost any vegetation damaged during the excavation and not restored to its original condition.

Brick paving must be removed neatly and stacked adjacent to the area excavated at a location that is acceptable to the user of such brick paved surface. The Contractor shall be responsible for replacing any bricks that are broken. The Contractor must reinstall the removed bricks to the satisfaction of the user. The same method of operation shall apply for paving slabs.

When excavating through kerbs, channels, edgings or any other edge unit, these shall be carefully removed up to the nearest whole unit and replaced. If these units are damaged, they shall be replaced with similar approved new units for the cost of the Contractor. Any water accumulating in excavated trenches or holes, either as a result of rain or due to the level of the water table, must be pumped out by the Contractor to make work inside the trench or hole possible.

Bid No.: 1492019 Page 77 of 81

Care must be taken to ensure that effective barriers are erected around all excavations to ensure the safety of the general public. In this regard the contractor must install an orange meshed barrier screen (or other type of barrier if deemed by the Contractor to be more effective) up to at least a metre in height around the entire excavated area. The barrier must be secured in such a way that it will not be disturbed by adverse weather conditions. Where the public requires access across the excavation, suitable, safe crossings must be provided. The Contractor must detail in his safety plan the measures that will be taken to safeguard the public. The Contractor shall be responsible for any liability arising out of his activities. This includes the safety of the public while the trenches are open. The Contractor must consult the owners of properties who may be affected by the activities of the Contractor e.g. driveways, well maintained verges or gardens.

3.2. Concrete Base

The concrete base, reinforcing cage and fixings shall be designed and constructed to the requirements of SANS 1200 A, SANS 1200 AA, SANS 1200 G, SANS 1200 GA, SANS 10144, SANS 10145, SANS 17660-1, SANS 17660-2 and SANS 920. The base design shall include at least two 110mm diameter PVC ducting to allow the supply cable and the two 35mm² copper earthing conductors access from below ground level to the inside of the mast without being visible above. The positioning of the ducting must be clearly marked on the foundation of the mast.

The Contractor shall test the soil bearing pressure for each mast prior to casting the concrete base to ensure that the soil load bearing conditions are suited to the specific concrete base design. The cost of these tests shall be included in the pricing schedule. The results of these tests must be discussed with the Engineer prior to casting of the concrete base and hand the results over to the Engineer prior on completion of the project. All reinforcing and foundation bolts shall have a minimum of 100mm concrete cover. The 28 days cube strength of the concrete shall be stated by the Contractor All foundations shall have a circular flat base from which a square plinth shall rise to above the surrounding ground level. After casting of the foundation, the slab shall be covered by earth, properly compacted. The area around the plinth shall be brought to the original level and shall be left neat and tidy.

3.3. Holding down Bolts

The holding down bolts shall be supplied as part of a welded up cage for accurate casting into the foundations. Suitable templates shall be used to ensure correct vertical and horizontal alignment of the bolts. Two nuts and washers and one locknut shall be supplied with each bolt as part of the holding down bolt assembly. The holding down U-bolts and the associated nuts and washers shall be mild steel hot dip galvanised to SANS 121.

4. Earthing of Mast

Earthing of the mast shall comply with SANS 10142 and SANS 10313. The minimum earthing shall however consist of two (2) x 2,4 m earth spikes installed on opposite sides of the mast. The top of the spikes shall be at least 600 mm below finished ground level.

Bid No.: 1492019 Page 78 of 81

The two spikes shall be connected together and from each Spike to the inside of the mast using a 70mm² bare copper conductor (or approved equivalent) via the ducting provided. There shall be no joints in the earth conductors and all terminations shall be to the manufacturer's requirements.

5. Marking

Each pole must be identified with an indelible identification mark. The method of marking shall be to the approval of the Engineer.

6. TESTING AND COMMISIONING

The complete installation shall be tested and commissioned in the presence of the Engineer for his approval.

C.3.4 SCHEDULES – TO BE COMPLETED

Schedule A in the table below must be completed by the Tenderer providing guarantees and technical particulars of the equipment and materials offered. Failure by the Tenderer to complete Schedule A could invalidate the tender.

ITEM 1 - LED Flood Light LUMINAIRES

	Flood Light LownwalkL9	SCHEDULE A
1. Item	DESCRIPTION	SCHEDULETT
1.8.	Ambient Temperature -15 to 45 degrees Celsius	
	Housing Inherently corrosion resistant material painted grey.	
	Preference is for marine grade high pressure die cast	
1.11.	Aluminium.	
1.15.	Place of Manufacture	
1.16.	Manufacturer's identification reference	
1.17.	Delivery Period	
1.13.	Are all the mentioned test reports included with this Tender?	
	Are the simulation software calculations included with the	
1.12.	Tender	
1.14.	Manufacturer	
1.18.	Warrantee (minimum 5 years)	
1.1.	Lumens offered	
1.2.	Wattage	
1.3.	Efficacy	
1.4.	System Voltage 220V to 240V at 50 Hz. (Provide test report)	
1.5.	Power Factor Minimum 0.9. (Provide test report)	
1.6.	Surge Protection ≥ 10 kV, 10kA	
1.7.	Lumen Maintenance	
	IP Rating of Light Fitting ≥ IP66 (Provide laboratory test	
1.9.	report)	
	Connection of LED inside modules designed that the failure of	
1.10.	one LED do not cause additional LED's to switch off.	

Bid No.: 1492019 Page 79 of 81

SPECIAL CONDITIONS

All contractors must comply with the following Special Conditions of Tender. Failure to adhere, will render your tender non-responsive.

SPECIAL CONDITIONS OF TENDER

A. CONDITIONS APPLICABLE TO THE PROMOTION OF MUNICIPAL LOCAL AND SOCIO-ECONOMIC DEVELOPMENT

The services provider must make use of 100% local unskilled labourers during the construction process, the contractor must accommodate the two interns of CITY OF MBOMBELA with regards to construction management on site, to develop capacity of department. It must also give on job training to all local labourers used on the project. Employment contracts to be in place and monitored (to ensure minimum wages are paid and UIF, etc. in place) as per GCC.

B. CONDITIONS APPLICABLE AFTER CLOSING OF TENDER BUT BEFORE A SELECTED SERVICE PROVIDER IS ANNOUNCED

Any additional information upon request must be submitted in writing within 48 hours of receipt.

C. CONDITIONS APPLICABLE AFTER AWARDING OF THE TENDER

The service provider must provide the Municipality with a completed list of local labourers to be used, within 14 days after final award of the tender for approval by the Municipality. The aforesaid list must be updated and submitted together with the service providers progress report and invoice, inclusive of the following details:

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

Any amendments prior approval from the Municipality. The service provider must provide the Municipality with a certificate confirming payments made to the local labourers. This certificate must be updated and submitted together with the service providers' progress report and invoice.

Payments will be made monthly as per agreed progress schedule. Invoices must be submitted before 12 noon on Wednesdays at George Creditors office, to ensure timeous payment Payment schedule to be agreed during kick-of meeting an amount of 10% of the contract value will be deduct for Retention. No CSI funding may be paid out from the Grant funding therefore the 1% contribution for CSI (on the value of the tender) will only be paid out of the CRR funds.

Bid No.: 1492019 Page 80 of 81

City of Mbombela Electrical Reticulation Standards & Specifications (C4)

Annexure A

Health and Safety Specification (C5)

Annexure B

Bid No.: 1492019 Page 81 of 81