

**BLUE CRANE ROUTE MUNICIPALITY**



**SUPPLY AND DELIVERY OF LED LIGHTS  
TENDER NUMBER T46/2024**

<b>CLOSING DATE 20 JANUARY 2025</b>	<b>CLOSING TIME: 12:00</b>
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**NAME OF** .....

**BIDDER\*** .....

**ADDRESS\*** .....

.....

.....

**TEL NUMBER\*** .....

**FAX NUMBER\*** .....

**EMAIL ADDRESS\*** .....

**(\* - TO BE COMPLETED BY BIDDER)**

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Prepared by:  
Blue Crane Route Municipality  
PO Box 21  
Somerset East  
5850

**INDEX**

<b>SECTION 1</b>		<b>PAGE</b>
1.1	INVITATION TO TENDER	2
1.2	TENDER CONDITIONS AND INFORMATION	3
1.3	GENERAL CONDITIONS OF CONTRACT	9
<b>SECTION 2</b>		
2.1	TERMS OF REFERENCE	15
<b>SECTION 3</b>		
3.1	MBD1: BID FOR REQUIREMENTS OF THE BLUE CRANE	42
	MBD3.1 –PRICING SCHEDULE-FIRM PROCES	44
<b>SECTION 4</b>		
4.1	MBD4: DECLARATION OF INTEREST	46
4.2	MBD6.1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022	49
4.3	MUNICIPAL RATES AND TAXES	54
4.4	AUTHORISED SIGNATORY	55
4.6	MBD8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES	56
4.7	MBD9: CERTIFICATE OF INDEPENDENT BID DETERMINATION	58
<b>SECTION 5</b>	DECLARATION	61
<b>SECTION 6</b>	MBD 7.1 CONTRACT FORM- PURCHASE OF GOODS/SERVICES	62
	MBD 7.2 RENDERING OF SERVICES	65
	MBD7.2 RENDERING OF SERVICE -PART 2	67

**SECTION 1.1: INVITATION TO TENDER**

**BLUE CRANE ROUTE MUNICIPALITY**

**BID NO: T46/2024**

**DESCRIPTION: SUPPLY AND DELIVERY OF LED LIGHTS**

Bids are hereby invited from potential service providers for the Supply and Delivery of LED Lights

Bids in a sealed envelope clearly marked “**BID NUMBER:T46/2024; Description: “Supply and Delivery of LED Lights”**” must be placed in the **Bid Box at 67 Nojoli Street, Somerset East**. The closing date for submission is **20 January 2025 by no later than 12h00**; no late submission will be considered. Thereafter bids will be opened in public.

A set of tender documents can be downloaded on [www.bcrm.gov.za](http://www.bcrm.gov.za)

Compulsory Briefing Session will be at the **Town Hall, Somerset East**, on the **20 January 2025 at 10 o'clock**, Bidders who are late for more than **15 minutes** won't be allowed to attend the briefing session

Bids will be evaluated on functionality and on the **80/20 preferential points as follows; 80 points for bid price and 20 points for Specific goals.**

**Specific Goals**

	<b>HDI STATUS</b>	<b>20 points allocation</b>
a)	Race	5
b)	Gender	5
c)	Disability	5
d)	Youth	5

For any technical enquiries, please contact Mr V Appolis Tel: 0422436400 ext. 6454, email: [appolisv@bcrm.gov.za](mailto:appolisv@bcrm.gov.za) for any SCM related enquiries can be directed to Ms N.Makhalima at [nozukom@bcrm.gov.za](mailto:nozukom@bcrm.gov.za) or Tel: 0422436441

**Service Providers shall take note of the following Bid Conditions:**

- ↯ The Blue Crane Route Municipality Supply Chain Management Policy will apply.
- ↯ In order to claim Preference points an evidence for claim of **Specific Goals** must be provided as stated on clause 1.2.26 of the Bid Document **No evidence – No points to be claimed.**
- ↯ Bidders should be registered on the CSD Supplier Database with a Tax Compliant Status.
- ↯ Bidders are to submit Certificate of Good Standing from their local municipality.
- ↯ Failure to complete all tender forms, data sheets and submit all supplementary information will lead to the tender being considered non-responsive.
- ↯ Bids which are late, incomplete, not completed in black ink, unsigned or submitted by facsimile or electronically will not be accepted;
- ↯ Bids submitted are to hold good for a period of 90 days.
- ↯ The Blue Crane Route Municipality does not bind itself to accept the lowest bid or any other bid and reserves the right to accept the whole or part of the bid;
- ↯ **It is expected of all bidders to fill in Section 4.4 Authority of Signatory**

Mr Mzwandile Patrick Nini  
MUNICIPAL MANAGER  
Blue Crane Route Municipality  
P O Box 21  
Somerset East  
5850  
**10 December 2024**

## SECTION 1.2: TENDER CONDITIONS AND INFORMATION

### 1.2.1 General and Special Conditions of Contract

The General Conditions of Contract (GCC) as well as Special Conditions of Contract (SCC) forming part of this set of tender documents will be applicable to this tender in addition to the conditions of tender. Where the GCC and SCC are in conflict with one another, the stipulations of the SCC will prevail.

### 1.2.2 Acceptance or Rejection of a Tender

The Municipality reserves the right to withdraw any invitation to tender and/or to readvertise or to reject any tender or to accept a part of it. The Municipality does not bind itself to accepting the lowest tender or the tender scoring the highest points.

### 1.2.3 Validity Period

Bids shall remain valid for ninety (90) days after the tender closure date.

### 1.2.4 Cost of Tender Documents

- Documents must be downloaded on [www.bcrm.gov.za](http://www.bcrm.gov.za)

### 1.2.5 Registration on Accredited Supplier Database

It is expected of all prospective service providers who are not yet registered on the Municipality's Accredited Supplier Database to register without delay on the prescribed form. The Municipality reserves the right not to award tenders to prospective suppliers who are not registered on the Database.

For database registration enquiries contact Mr Thandi Halom at [thandih@bcrm.gov.za](mailto:thandih@bcrm.gov.za) / 042 243 6458.

### 1.2.6 Completion of Tender Documents

(a) The original tender document must be completed fully in black ink and signed by the authorized signatory to validate the tender. **Section 5: DECLARATION and SECTION 6: CONTRACT FORM: PART1 (TO BE FILLED IN BY THE BIDDER)** must be completed and signed by the authorized signatory and returned. Failure to do so will result in the disqualification of the tender.

(b) Tender documents may not be retyped. Retyped documents will result in the disqualification of the tender.

(c) The complete original tender document must be returned. Missing pages will result in the disqualification of the tender.

(d) No unauthorised alteration of this set of tender documents will be allowed. Any unauthorised alteration will disqualify the tender automatically. Any ambiguity has to be cleared with contact person for the tender before the tender closure.

(e) No tipex to be used, usage of tipex will result in the disqualification of the tender.

## **1.2.7 Compulsory**

### **Documentation 1.2.7.1 Tax**

#### **Clearance Certificate**

(a) CSD Report with a Tax compliance status must accompany the bid documents. In the case of a Consortium/Joint Venture every member must submit a separate Tax Clearance Certificate with the bid documents.

## **1.2.8 Other Documentation**

### **1.2.8.1 Construction Industry Development Board (CIDB) (If applicable)**

When applicable, the bidder's CIDB registration number must be included with the tender. The Municipality will verify the bidder's CIDB registration during the evaluation process.

### **1.2.8.2 Municipal Rates, Taxes and Charges**

A successful bidder and its directors must not be in arrears for more than 90 days with any municipality they are residing in.

## **1.2.9 Authorised Signatory**

(a) A copy of the recorded Resolution taken by the Board of Directors, members, partners or trustees authorising the representative to submit this bid on the bidder's behalf must be attached to the Bid Document on submission of same.

(b) A bid shall be eligible for consideration only if it bears the signature of the bidder or of some person duly and lawfully authorised to sign it for and on behalf of the bidder.

## **1.2.10 Site / Information Meetings**

(a) Site or information meetings, if specified, are compulsory. Bids will not be accepted from bidders who have not attended compulsory site or information meetings. Bidders that arrive 15 minutes or more after the advertised time the meeting starts will not be allowed to attend the meeting or to sign the attendance register.

(b) All partners or the leading partner of a Joint Venture must attend the compulsory site or information meeting.

## **1.2.11 Samples**

Samples, if requested, are to be provided to the Municipality with the tender document or as stipulated.

### **1.2.12 Quantities of Specific Items**

If tenders are called for a specific number of items, the Municipality reserves the right to change the number of such items to be higher or lower. The successful bidder will then be given an opportunity to evaluate the new scenario and inform the Municipality if it is acceptable. If the successful bidder does not accept the new scenario, it will be offered to the second-placed bidder. The process will be continued to the Municipality's satisfaction.

### **1.2.13 Submission of Tender**

(a) The tender must be placed in a sealed envelope, or envelopes when the two-envelope system is specified, clearly marked with the tender number, title as well as closing date and time and placed in the **tender box at 67 NOJOLI STREET SOMERSET EAST by not later than 12:00 on 20 January 2025.**

(b) Faxed, e-mailed and late tenders will not be accepted. Tenders may be delivered by hand, by courier, or posted at the bidder's risk and must be received by the deadline specified above, irrespective of how they are sent or delivered.

### **1.2.14 Expenses Incurred in Preparation of Tender**

The Municipality shall not be liable for any expenses incurred in the preparation and submission of the tender.

### **1.2.15 Contact with Municipality after Tender Closure Date**

Bidders shall not contact the Blue Crane Route Municipality on any matter relating to their bid from the time of the opening of the bid to the time the contract is awarded. If a bidder wishes to bring additional information to the notice of the Blue Crane Route Municipality, it should do so in writing to the Blue Crane Route Municipality. Any effort by the firm to influence the Blue Crane Route Municipality in the bid evaluation, bid comparison or contract award decisions may result in the rejection of the bid.

### **1.2.16 Opening, Recording and Publications of Tenders Received**

(a) Tenders will be opened on the closing date immediately after the closing time specified in the tender documents. The names of the bidders, and if practical, the total amount of each bid and of any alternative bids will be read out aloud.

(b) Details of tenders received in time will be recorded in a register which is open to public inspection.

(c) Faxed, e-mailed and late tenders will not be accepted.

### **1.2.17 Evaluation of Tenders**

Tenders will be evaluated in terms of their responsiveness to the tender specifications and requirements as well as such additional criteria as set out in this set of tender documents.

### **1.2.18 Procurement Policy**

Bids will be awarded in accordance with the Preferential Procurement Regulations, 2022 pertaining to the Preferential Procurement Policy Framework Act, No 5 of 2000 and its amendments as well as the Municipality's Supply Chain Policy as at the 28 February 2023.

### **1.2.19 Contract**

(a) The bidders are expected to sign the agreement in Section 6 part 1 of this bid document. The Signing of Part 2 of Section 6 of this bid document by the municipality signifies the conclusion of the contract. The Municipality, at its discretion, may request the signing of an additional Service Level Agreement which, together with the signed tender document, will constitute the full agreement between the Municipality and the successful bidder.

### **1.2.20 Subcontracting**

- (a) The Contractor shall not subcontract the whole of the Contract.
- (b) Except where otherwise provided by the Contract, the Contractor shall not subcontract any part of the Contract without the prior written consent of the Municipality, which consent shall not be unreasonably withheld.
- (c) The contractual relationship between the Contractor and any subcontractors selected by the Contractor in consultation with the Municipality in accordance with the requirements of and a procedure contained within the Scope of Work, shall be the same as if the Contractor had appointed the subcontractor in terms of paragraph (b) above.
- (d) Any consent granted in accordance with paragraph (b) or appointment of a subcontractor in accordance with paragraph (c) shall not imply a contract between the Municipality and the subcontractor, or a responsibility or liability on the part of the Municipality to the subcontractor and shall not relieve the Contractor from any liability or obligation under the Contract and he shall be liable for the acts, defaults and neglects of any subcontractor, his agents or employees as fully as if they were the acts, defaults or neglects of the Contractor, his agents or employees.
- (e) The Contractor shall not be required to obtain such consent for –
  - (i) the provision of labour, or
  - (ii) the purchase of materials which are in accordance with the Contract, or
  - (iii) the purchase or hire of Construction Equipment.

### **1.2.21 Language of Contract**

The contract documents will be compiled in English and the English versions of all referred documents will be taken as applicable.

### **1.2.22 Extension of Contract**

The contract with the successful bidder may be extended should additional funds become available.

### **1.2.23 Stamp and Other Duties**

The successful bidder will be liable for all duties and costs on legal documents resulting in the establishment of a contract and for the surety and retentions.

### **1.2.24 Wrong Information Furnished**

Where a contract has been awarded on the strength of the information furnished by the bidder which, after the conclusion of the relevant agreement, is proved to have been incorrect, the Municipality may, in addition to any other legal remedy it may have, recover from the contractor all costs, losses or damages incurred or sustained by the Municipality as a result of the award of the contract.

### **1.2.25 Past Practices**

- (a) The bid of any bidder may be rejected if that bidder or any of its directors have abused the municipality's supply chain management system or committed any improper conduct in relation to such system.
- (b) The bid of any bidder may be rejected if it is or has been found that the bidder or any of its directors influenced or tried to influence any official or councillor with this or any past tender.
- (c) The bid of any bidder may be rejected if it is or has been found that that bidder or any of its directors offered, promised or granted any official or any of his/her close family members, partners or associates any reward, gift, favour, hospitality or any other benefit in any improper way, with this or any past tender.

### **1.2.26 Evidence for claim of specific Goals**

- a) Those bidders who qualify to claim points as an HDI based on Race must submit, a certified copy of an Identity Document (certification must not be older than 3 months) and a CSD report.
- b) Those bidders who qualify to claim points as an HDI based on Gender must submit, a certified copy of an Identity Document (certification must not be older than 3 months) and/or a CSD report.
- c) Those bidders who qualify to claim points as an HDI based on Disability must submit, a Medical Certificate from a registered Medical Doctor certifying such.
- d) Those bidders who qualify to claim points as an HDI based on Youth; the ID number will be used to verify whether they are between ages 18 – 35.
- e) Points will be allocated on ownership prorated according to the percentage of ownership.**

**FAILURE TO COMPLY WITH THE ABOVEMENTIONED WILL RESULT IN NO PREFERENCE POINTS BEING AWARDED**



### **1.2.27 Letter of Good Standing from the Commissioner of Compensation**

- (a) A valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof, must accompany the bid.
- (b) In the case of a Consortium/Joint Venture every member must submit a separate valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof with the bid documents.
- (c) If a bid is not supported by a valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof, either as an attachment to the bid documents or on record in the case of suppliers registered on the Supplier Database of the Municipality, the Municipality reserves the right to obtain such document after the closing date. If no such document can be obtained within a period as specified by the Municipality, the bid will be disqualified.
- (d) If a bid is accompanied by proof of application for valid Letter of Good Standing from the Compensation Commissioner, the original or certified copy thereof must be submitted on/or before the final date of award.
- (e) Should a bidder's Letter of Good Standing from the Compensation Commissioner expires during the contract period, a valid certificate must be submitted within an agreed upon time.
- (f) The right is reserved to not award a tender if a valid Letter of Good Standing from the Compensation Commissioner or a certified copy thereof is not submitted within the requested time.

### **1.2.28 Enquiries**

Enquiries in connection with this tender, prior to the tender closure date, may be addressed to Mr V Appolis at telephone (042) 243 6400,ext 6454 email: [appolisv@bcrm.gov.za](mailto:appolisv@bcrm.gov.za)

## 1.3 GENERAL CONDITIONS OF CONTRACT

### 1. Definitions

1. The following terms shall be interpreted as indicated:

- 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
- 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
- 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.7 "Day" means calendar day.
- 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
- 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
- 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the goods are so delivered and a valid receipt is obtained.
- 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the goods covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price, which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
- 1.25 "Supplier" means the successful bidder who is awarded the contract to maintain and administer the required and specified service(s) to the State.
- 1.26 "Tort" means in breach of contract.
- 1.27 "Turnkey" means a procurement process where one service provider assumes total responsibility for all aspects of the project and delivers the full end product / service required by the contract.
- 1.28 "Written" or "in writing" means hand-written in ink or any form of electronic or mechanical writing.

## **2. Application**

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services (excluding professional services related to the building and construction industry), sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific goods, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

## **3. General**

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 Invitations to bid are usually published in locally distributed news media and on the municipality/municipal entity website.

## **4. Standards**

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

## **5. Use of contract documents and information inspection**

- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

## **6. Patent Rights**

- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.
- 6.2 When a supplier developed documentation / projects for the municipality / municipal entity, the intellectual, copy and patent rights or ownership of such documents or projects will vest in the municipality / municipal entity.

## **7. Performance security**

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms: (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or (b) a cashier's or certified cheque.
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified.

## **8. Inspections, tests and analyses**

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that goods to be produced or services to be rendered should at any stage be subject to inspections, tests and analyses, the bidder or contractor's premises shall be open, at all reasonable hours, for inspection by a representative of the purchaser or organization acting on behalf of the purchaser.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the goods to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the goods or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such goods or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Goods and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.

- 8.7 Any contract goods may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected goods shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with goods, which do comply with the requirements of the contract. Failing such removal the rejected goods shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute goods forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected goods, purchase such goods as may be necessary at the expense of the supplier.
- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 22 of GCC.
- 9. Packing**
- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, and in any subsequent instructions ordered by the purchaser.
- 10. Delivery and documents**
- 10.1 Delivery of the goods and arrangements for shipping and clearance obligations, shall be made by the supplier in accordance with the terms specified in the contract.
- 11. Insurance**
- 11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified.
- 12. Transportation**
- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified.
- 13. Incidental Services**
- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any:
- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
  - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
  - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
  - (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
  - (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- 13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.
- 14. Spare parts**
- 14.1 As specified, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and;
  - (b) in the event of termination of production of the spare parts: (i) advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.
- 15. Warranty**
- 15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- 15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

- 15.4 Upon receipt of such notice, the supplier shall, within the period specified and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.
- 16. Payment**
- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated.
- 17. Prices**
- 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized or in the purchaser's request for bid validity extension, as the case may be.
- 18. Variation orders**
- 18.1 In cases where the estimated value of the envisaged changes in purchase does not vary more than 15% of the total value of the original contract, the contractor may be instructed to deliver the goods or render the services as such. In cases of measurable quantities, the contractor may be approached to reduce the unit price, and such offers may be accepted provided that there is no escalation in price.
- 19. Assignment**
- 19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.
- 20. Subcontracts**
- 20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.
- 21. Delays in the supplier's performance**
- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the goods are required, or the supplier's services are not readily available.
- 21.4 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalties.
- 21.5 Upon any delay beyond the delivery period in the case of a goods contract, the purchaser shall, without cancelling the contract, be entitled to purchase goods of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.
- 22. Penalties**
- 22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

## **23. Termination for default**

- 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:  
(a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2; (b) if the supplier fails to perform any other obligation(s) under the contract; or (c) if the supplier, in the judgement of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner, as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the supplier as having no objection and proceed with the restriction.
- 23.5 Any restriction imposed on any person by the purchaser will, at the discretion of the purchaser, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the purchaser actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:  
(i) the name and address of the supplier and / or person restricted by the purchaser;  
(ii) the date of commencement of the restriction  
(iii) the period of restriction; and  
(iv) the reasons for the restriction. These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.
- 23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website

## **24. Antidumping and countervailing duties and rights**

- 24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the supplier to the purchaser or the purchaser may deduct such amounts from moneys (if any) which may otherwise be due to the supplier in regard to goods or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

## **25. Force Majeure**

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure. 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

## **26. Termination for insolvency**

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the purchaser.

## **27. Settlement of Disputes**

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Notwithstanding any reference to mediation and/or court proceedings herein, (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and  
(b) the purchaser shall pay the supplier any monies due the supplier for goods delivered and / or services rendered according to the prescripts of the contract.
- 28. Limitation of Liability**
- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6; (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
- 29. Governing language**
- 29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
- 30. Applicable law**
- 30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified.
- 31. Notices**
- 31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.
- 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
- 32. Taxes and duties**
- 32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid SARS must have certified that the tax matters of the preferred bidder are in order.
- 32.4 No contract shall be concluded with any bidder whose municipal rates and taxes and municipal services charges are in arrears.
- 33. Transfer of contracts**
- 33.1 The contractor shall not abandon, transfer, cede assign or sublet a contract or part thereof without the written permission of the purchaser
- 34. Amendment of contracts**
- 34.1 No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement that the agreement to amend or vary shall be in writing, shall also be in writing.
- 35. Prohibition of restrictive practices**
- 35.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder(s) is / are or a contractor(s) was / were involved in collusive bidding.
- 35.2 If a bidder(s) or contractor(s) based on reasonable grounds or evidence obtained by the purchaser has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in section 59 of the Competition Act No 89 Of 1998. 35.3 If a bidder(s) or contractor(s) has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

# SPECIFICATION



## Blue Crane Route Municipality

Supply and deliver energy efficient LED Street Lights/luminaires and providing skills transfer.

### Technical Specification

**Scope:** The specification covers the requirements for the manufacturer, testing, supply and delivery of LED luminaires.

### Quantities of lights:

- **80 x 36W LED Street Lights (Retrofitting 125W Sodium Vapours)**
- **20 x 90W LED Street Lights (Retrofitting 250W Sodium Vapours)**
- **40 x 240W LED Flood Lights (Retrofitting 400W Sodium Vapours)**
- **15 x 90W Indoor LED Lights (Retrofitting 250W Sodium Vapours)**
- **10 x 90W Outdoor Wall Mounted LED Lights (Retrofitting 250W Sodium Vapours)**
- **7 x 90W Parking Area LED Lights Mounted on ..... diameter poles (Retrofitting 250W Sodium Vapours)**

Skills transfer shall be provided during the installation to the operations and maintenance staff. The skills service shall pertain to how the LED lights are to be correctly handled, installed, operated, maintained and repaired.

The reliability, performance and safety of the luminaires have a direct impact on the energy consumption performance and standard of functional lighting to be provided.

### General Requirements

The LED Luminaire offered by the bidder shall comply with the requirements of SANS/IEC 60598 (safety requirements), SANS 475 (Performance Requirements) and normative requirements stated below or equivalent.

Only certified luminaires for exterior lighting shall be accepted as well as the interior and parking lot LED lights.

Compliance to these requirements shall be supported by documentary evidence in the form of type test reports/product certification to be submitted with the bid. The test reports and certification shall be specific to the luminaire family proposed inclusive of the luminaire proposed. Measurements shall be traceable to international measurement standards.

The proposed LED luminaire should be manufactured by an ISO 9001 accredited supplier, inclusive of the facilities where the luminaires are manufactured, for which certification shall be valid upon bid closing date.

The LED luminaire shall be supplied and delivered as a complete unit ready for use with all components fully assembled including the luminaire housing, driver, control gear, LED modules, lenses, reflectors, wiring, mounting brackets etc.



### Site Operational Conditions

The proposed LED Luminaire shall maintain design operational output performance when subjected to the following conditions:

Operational Description	Operational Condition
Nominal Supply Voltage	230V AC (10%)
Nominal Supply Frequency	50Hz (10%)
Climate	Dry (Inland)
Altitude	0m up to 3000m
Ambient Operating Temperature, Ta	-10°C to + 40°C
Solar Radiation	> 1000W/m <sup>2</sup>
Relative Humidity	20% - 90%
Average Annual Rainfall	460mm per Annum
Lightning Ground Flash Density	> 8 Flashes per km <sup>2</sup> /Year
Air Pollution	Heavy Atmospheric Pollution
Prescribed Minimum Cleaning Cycle	> 3 Years

### Normative References

Standard	Description
ANSI C78_377A	Specification for Chromaticity of Solid State Lighting SSL Products
ARP 035	Guidelines for Installation and Maintenance of Street Lighting
EN 55015	Limits and Methods of Measurement of Radio Disturbance Characteristics of Electrical Lighting and Similar Equipment
IEC 62471	Photo Biological Safety of Lamps and Lamp Systems
IEC TR 61547 - 1	Equipment for General Purpose – Objective Test Method for Stroboscopic effects of Lighting Equipment
IES LM 79-19	Optical and Electrical Measurements of Solid State Lighting Products
IES LM 80-08	Measuring Lumen Maintenance of LED Light Sources
IES LM 80-15	Measuring Luminous Flux and Colour Maintenance of LED Packages, Arrays and Modules
IES TM 21-11	Projecting Long term Lumen Maintenance of LED Light Sources
ISO 9001: 2008	Quality Management System (Optional)
SANS 121	Hot Dip Galvanized Coatings on Fabricated Iron and Steel Articles Specifications and Test Methods
SANS 215	Limits and Methods of Measurement of Radio Disturbance Characteristics of Electrical Lighting and Similar Equipment.
Sans 475	Luminaires for interior lighting, street lighting and flood lighting – performance requirements
SANS 529	Heat resisting wiring cables
SANS 1088	Luminaires entries and spigots
SANS 1091	National Colour Standard
SANS 10098-1	Public Lighting Part 1: The lighting of public thoroughfares

Standard	Description
SANS 10098-2	Public Lighting Part 2: Lighting of certain specific areas of street

	and highways
<b>SANS 10389-1</b>	Artificial lighting of exterior for work and safety
<b>SANS 10389-2</b>	Exterior security lighting
<b>SANS 10389-3</b>	Guide on the limitation of the effects of obtrusive light from outdoor lighting installations
<b>SANS/IEC 51706</b>	Aluminium and aluminium alloys – castings – chemical composition and mechanical properties
<b>SANS/IEC 60529</b>	Degree of protection provided by enclosures (IP Code)
<b>SANS/IEC 60598-1</b>	Luminaires Part 1: General requirements and tests
<b>SANS/IEC 60598-2-3</b>	Luminaires Part 2 - 3: Particular requirements – Luminaires for road and street lighting
<b>SANS/IEC 60598-2-5</b>	Luminaire: Particular requirements: Luminaires for flood lights
<b>SANS/IEC 61000-3-2</b>	Electromagnetic compatibility (EMC) Part 3-2: Limits - Limits for harmonic current emission
<b>SANS/IEC 61000-3-3</b>	Electromagnetic compatibility (EMC) Part 3-3: Limits – Limitation of voltage changes, Voltage Fluctuations and flickering public voltage supply systems
<b>SANS/IEC 61000-4-5</b>	Surge immunity test – Testing and measurement
<b>SANS/IEC 61347-1</b>	Lamp control gear Part 1: General and safety requirements
<b>SANS/IEC 61347-2-13</b>	Lamp control gear Part 2 – 13: Particular requirements for DC or AC supplied electronic control gear for LED lights
<b>SANS/IEC 61547</b>	Equipment for general lighting purposes – EMC immunity requirements
<b>SANS/IEC 62262</b>	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK) Code
<b>SANS/IEC 62384</b>	DC or AC Supplied electronic control gear for LED Modules Performance Requirements
<b>ICAO</b>	Annex 14 to the Convention of International Civil Aviation, Volume 1 Aerodrome Design and Operations (Optional where lighting is a potential obstruction to aircraft)

### **Safety Requirements**

The safety requirements of the luminaire shall comply with the minimum requirements stipulated in SANS/IEC 60598 for the respective type of luminaire.

The luminaire safety requirements should additionally comply to:

- IEC 62471, Photo biological safety of lamps and lamp systems.
- IEC TR 6157-1, Equipment for general lighting purposes – EMC immunity requirements - Part 1: An objective light flickermeter and voltage fluctuation immunity test method. This is to determine the Short term Flicker indicator (PstLM) of the luminaire and;
- IEC TR 63518, Equipment for general lighting purposes – Objective test method for stroboscopic effect Visibility measure (SVM) of the luminaire.

The bidder shall submit a valid SANS/IEC 60598 test report and certificate for each luminaire offered.

### **Photometric Performance Requirements**

### Luminous Flux

It is the nominal luminous flux output of the luminaire provided at Ta of 25 0C once the luminaire and the luminous flux output has reached operational stabilisation after being energised.

A luminous flux derating factor of the nominal flux shall be provided to obtain the luminous flux at the maximum operational temperature condition specified.

The SI unit of luminous flux is the lumen (lm).

### Luminous Efficacy

The total system efficiency shall comply with the minimum total system luminous efficacy requirements in Table 2, as relevant.

The value of total system luminous efficacy to be stated in Schedule 2: Schedule of Technical Data is to be calculated as follows:

$$\text{total system luminous efficacy} = \frac{\text{source nominal luminous flux output} \times \text{LOR [lm]}}{\text{total system power consumption [W]}}$$

Where,

- The total system power consumption is the total power consumed by the luminaire as whole, inclusive of control gear and light source.
- LOR refers to the ratio between the luminous flux emitted by the luminaire, measured at ambient operating temperature (Ta) and the nominal luminous flux of the light source (this would refer to the nominal luminous flux emitted from the LED).

Table 2: Minimum Luminous efficacy Ta of 25°C

Product Type	Minimum Luminous Efficacy (lm/W)	Year Applicable
All Types LED Luminaire	100 With depreciative luminous flux output	<2021
	130 With depreciative OR constant luminous flux output	2021 less or equal t < 2024
	160 With constant luminous flux output	Greater or equal 2024

A luminous efficacy derating factor shall be provided to obtain the total system efficiency at the maximum operational temperature condition specified.

### Colour Temperature

The average maintained correlated colour temperature (CCT) of the luminaire shall comply with the recommended CCT indicated in **Table 3**, as relevant.

*Table 3. Correlated Colour Temperature*

<b>Product Type</b>	<b>Correlated Colour temperature K</b>	<b>Recommendation</b>
<b>All Types LED Luminaire</b>	3000	Residential areas, recreational lighting
	4000	Freeways, main roadways, industrial areas, parking areas, security lighting
<b>Note:</b>	Sensitive areas (e.g, ecologically sensitive areas such as lagoons, nature reserves, parks) may require a specific CCT	

The LED modules shall have a colour consistency variation of chromaticity coordinates within a five-step SDCM (standard deviation of colour matching).

The variation in the correlated colour temperature of the LEDs shall be restricted in accordance with ANSI C78-377A or equivalent with the variation limited to within 250K of the nominal average correlated colour temperature.

The lumen maintenance of the LED modules shall be measured in accordance with IES LM-80-08 and LM-80-15 or equivalent. The measured data shall be extrapolated to L70 using the method of IES TM-21-11 or equivalent.

The Bidder shall provide lumen depreciation graphs as part of the returnable documents in this bid. The documents should indicate the time it takes for the LED luminaire to reach L90, L80, L70 and L50 at T<sub>a</sub> of 25°C.

#### **Rated Life**

The useful rated life of the luminaire shall be stated as the operating hours between the start of the complete luminaire system (not the LEDs only) use and the moment when for 10% of a population of luminaires the light output has gradually degraded to a value below 70% (L70) of the initial luminous flux at the performance ambient temperature specified.

This is also referred to as the L70B10 rated lifetime at T<sub>a</sub> of 25°C.

#### **Electrical Performance Requirements**

##### **Power Consumption**

The LED luminaire offered shall achieve a minimum of 40% energy savings when replacing the existing luminaire, (e.g. 1000W HPS). The maximum total system power rating of the LED luminaire shall therefore not exceed the nominal value of (e.g. 600W = 40% energy saving of 1000W), with a 10% maximum tolerance of nominal value.

The Bidder shall indicate the total system nominal power rating consumption in **Schedule 2: Schedule of Technical Data**, supported by the Product Technical Datasheet.

##### **Operating Frequency**

The LED luminaire shall be subjected to an operational Frequency of 50Hz ±10%.

##### **Operating Voltage**

The LED luminaire performance shall remain constant when subjected to operational nominal voltages inclusive of tolerance that shall comply with the requirements in **Table 4**, as relevant.

Table 4: Nominal Operating Voltages

Product Type	Rated Operating Voltage (V)	Tolerance Percentage %	Year Applicable
All Types LED Luminaire	230	±10.00	<2021
	220, 230 & 240	±10.00	greater or equal 2021

Where the minimum and maximum operational voltages are defined as:

☒ Minimum Operational Voltage = Lowest Rated Operating Voltage less tolerance

(e.g. 220V – 10% tolerance = 198V minimum operational voltage)

☒ Maximum Operational Voltage = Highest Rated Operating Voltage less tolerance

(e.g. 240V + 10% tolerance = 264V maximum operational voltage)

**Power Factor and Total Harmonic Distortion**

The power factor is defined as the minimum fundamental power factor (displacement power factor), PF. It quantifies the displacement (phase-shift) between the fundamental current and voltage waveforms by calculating the cosine of the phase-shift angle. The fundamental power factor is a more detailed measure to quantify the displacement of the current and its effect on the power supply network.

The total harmonic distortion is defined as the measurement of the harmonic distortion present in a signal and is defined as the ratio of the sum of the powers of all harmonic components to the power of the fundamental frequency.

The minimum fundamental power factor and total harmonic distortion of the luminaire shall comply with the requirements in **Table 5, as relevant.**

Table 5: Minimum fundamental power factor and total harmonic distortion

Product Type	Fundamental Power Factor (PF) & Total Harmonic Distortion (THD)	Year Applicable
<b>Non - Dimmable LED Luminaire</b>	PF greater or equal 0.90 for 100% load factor with maximum harmonic distortion levels limited to 10%.	< 2021
<b>Dimmable LED Luminaire</b>	PF > or equal 0.90 for 100% load factor with maximum harmonic distortion levels limited to 10%. AND PF > or equal 0.70 for 50% load factor (50% dimming of luminaire) with maximum harmonic distortion levels limited to 20%.	
<b>Dimmable LED Luminaire</b>	PF > or equal 0.98 for 100% load factor with maximum harmonic distortion levels limited to 10%.	or equal 2021
<b>Dimmable LED Luminaire</b>	PF > 0.98 for 100% load factor with maximum harmonic distortion levels limited to 10%. AND	

	PF > 0.80 for 50% load factor (50% dimming of luminaire) with maximum harmonic distortion levels limited to 15%.	
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These limits are imposed to reduce interference on the electrical network.

**Surge Protection**

A surge protection device shall be provided to protect the driver and the LED modules. The surge protection device shall be mounted inside the control gear compartment, and shall be easily replaceable. The surge protection device shall be capable to withstand the following minimum surge requirements:

1. Open Circuit Voltage Peak, 1.2/50µs, of 10kV; and
2. Short Circuit Current Peak, 8/20µs, of 10kA.

The Bidder shall provide a Technical Data Sheet of the surge protection device that is integrated into the offered luminaire.

**Electronic Driver**

The electronic driver shall comply with the requirements, or equivalent thereof, of:

1. SANS/IEC 61000-3-2;
2. SANS/IEC 61000-3-3;
3. SANS/IEC 61000-4-5;
4. SANS/IEC 61347-1;
5. SANS/IEC 61347-2-13;
6. SANS/IEC 61547; and
7. SANS/IEC 62384.

The driver shall be mounted inside the control gear compartment of the luminaire, and shall be easily replaceable.

The driver shall be fully enclosed with an IP Rating of 65 or better with safety class of one (1).

The minimum electronic driver functionality shall comply with the requirements in **Table 6, as relevant.**

The Bidder shall provide additional technical information relating to optimal dimming functionality of the driver for the offered LED luminaire.

Product Type	Driver Functionality	Year Applicable
Non-Dimmable LED Luminaire	Shall not be dimmable AND Cold starting driver AND The driver shall have an efficiency of at least 85%.	< 2021
Dimmable LED Luminaire	The dimming function shall perform optimally through DALI, 1 – 10V or PWM dimming methods. The dimming range shall be at least between 20 – 100% load. AND Cold starting driver AND The driver shall have an efficiency of at least 85%,	

	<p>SANS/IEC 62384  AND  May be connected to and controlled by a telemanagement device</p>	
Non – dimmable LED Luminaire	<p>Shall not be dimmable  AND  Ramp soft starting or zero crossing detection driver with limited inrush current.  AND  The driver shall have an efficiency of at least 90%, SANS/IEC 62384.</p>	
Dimmable LED Luminaire	<p>The dimming function shall perform optimally through DALI and 1-10V dimming method functionality. The dimming range shall be at least between 10 – 100% load.    AND    Shall be flicker free for dimming range at least between 60 – 100% load.    AND    Ramp, soft starting or zero current detection driver with limited inrush current.  AND The driver shall have an efficiency of at least 90%, SANS/IEC 62384.    AND    May be connected to and controlled by a telemanagement device. The driver would be able to provide the telemanagement system with the following minimum operational information:  1. Operational Power Consumption;  2. Operational Voltage;  3. Operational Current;  4. Power Factor;  5. Operational Temperature; and  6. Hours Operated.</p>	2021 less or equal t < 2024
Non-Dimmable LED Luminaire	Shall be replaced with a dimmable LED Luminaire	
Dimmable LED Luminaire	<p>The dimming function shall perform optimally through DALI or advanced communication dimming method functionality. The dimming range shall be at least between 10 – 100%.    AND</p>	Greater or equal 2024

	<p>Shall be flicker free throughout dimming range of load.</p> <p>AND</p> <p>Shall be a ramp, soft starting or zero crossing detection driver with limited inrush current.</p> <p>AND</p> <p>Shall have an efficiency of at least 90%, SANS/IEC 62384.</p> <p>AND</p> <p>May be connected to and communicate with a telemanagement device. The driver shall have integrated writeable data storage capability. The driver would be able to provide the telemanagement system with the following minimum operational information:</p> <ol style="list-style-type: none"> <li>1. Operational Power Consumption;</li> <li>2. Operational Voltage;</li> <li>3. Operational Current;</li> <li>4. Power Factor;</li> <li>5. Operational Temperature;</li> <li>6. Hours Operated;</li> <li>7. GPS location;</li> <li>8. Driver product name, manufacturer, serial number, part ordering number;</li> <li>9. Luminaire product name, manufacturer, serial number, part ordering number;</li> <li>10. Brochures, certificates and technical datasheet of driver and luminaire;</li> </ol> <p>Should the driver be replaced, the new driver shall integrate autonomously with the telemanagement system and obtain the operational history and data of the luminaire from the telemanagement system so as to maintain autonomous operational procedures.</p>	
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### **Wiring**

The wiring shall comply with the requirements of SANS/IEC 60598-1 and SANS 529 or equivalent. The wiring of the luminaire shall be flexible and suitably insulated to withstand the maximum voltage and maximum temperatures to which it will be subjected to during operation.

The terminal blocks of the incoming supply cable shall be fixed independently, fastened, and housed inside the control gear compartment within the body of the luminaire. The terminal shall be indelibly



marked either by means of standardised colour coding for the respective terminals or by the letters L, N & E (Live, Neutral and Earth terminals respectively).

### **Provision for Earthing**

The luminaire shall be earthed in accordance with the clause 13 of the Electrical Machinery Regulations of the Occupational Health and Safety (OSH) Act (Act 85 of 1993) or equivalent. The Earthing of the luminaire shall comply with SANS/IEC 60598-1 or equivalent. All parts of an earth terminal shall be made of brass or other corrosion resistant and galvanic reaction resistant metal. The earthing contact surface of the luminaire shall be bare metal and shall not be painted or varnished surfaces.

### **Mechanical Performance Requirements**

#### **Construction**

The luminaire housing shall be robustly constructed from non-corrosive aluminium material to SANS/IEC 51706 or equivalent; and shall be weatherproof, hail proof, insect proof, corrosion proof, ultra-violet light resistant, debris and particulate accumulation resistant and vandal resistant with a securing device to prevent unauthorised removal or access into the luminaire.

The LED luminaire offered to be installed on the identified high mast and/or street light pole shall not result in the structural loading of the high mast and/or street light pole being exceeded.

The luminaire shall be constructed from light weight durable materials which for all parts shall be compatible and failure or deterioration shall not occur due to electrolytic action or by differential thermal expansion.

Should the luminaire housing be coated, the coating shall provide additional weathering protection to the housing material and shall not be used as a corrosion protection replacement for the non-corrosive aluminium material housing. The Bidder shall provide in the Product Technical Datasheet of the luminaire the list of colour codes options available for the coating that comply with SANS 1091 or equivalent.

All metal components shall be suitably treated against corrosion. Ferrous components shall be hot-dip galvanised to SANS/IEC 121 or equivalent. Hinge pins, clips, clamps, set screws, bolts, nuts and washers shall be manufactured from an appropriate grade of stainless steel (grade 304 or better).

The luminaire shall have successfully passed an accelerated ageing test.

The luminaire shall be tilt adjustable relative to the horizontal plane. The luminaire shall be supplied with all necessary mechanical accessories (bolts, nuts, brackets, etc.) to be securely fitted for:

1. Flood lighting flat horizontal or vertical surfaces; and/or
2. Street lighting with 75mm diameter post top or 42mm diameter outreach arm mounting.

The Bidder shall provide the instructional installation manual as part of the returnable documents in this bid.

The optical compartment of the luminaire shall be completely enclosed with a clear flat tempered glass protector or similar impact resistant non-degrading, ultraviolet resistant material to a minimum of IP65 tightness to maintain optimal photometric performance over its lifetime.

The LED luminaire shall be so designed and constructed that there is sufficient space to permit easy repairs / replacement of components and reassembly without difficulty, and without removal of the luminaire from its mounting position.

Due attention shall be paid to the accessibility of parts and to other requirements necessary for efficient maintenance and cleaning. This shall include but not limited to:

1. How secure, yet accessible the control gear compartment is;
2. Replaceable control gear components and the ease at which these components can be removed and replaced;
3. The ease with which the optical compartment protector can be cleaned and replaced if damaged;
4. The ease with which the entire luminaire can be cleaned; and
5. The ease with which the luminaire can be installed and replaced if damaged.

#### 4.8.2 Ingress Protection and Impact Rating

##### a) **Ingress Protection**

The complete LED luminaire shall have a minimum IP rating of 65 or better in accordance with SANS/IEC 60529 or equivalent.

Should a telemanagement device be included with the luminaire, the device shall have a minimum IP rating of 65 or better in accordance with SANS/IEC 60529 such that it does not diminish the IP rating of the whole luminaire.

##### b) **Impact Rating**

The complete LED luminaire shall have a minimum IK rating of 08 or better in accordance with SANS/IEC 62262 or equivalent.

#### **Control Gear Compartment**

The electronic driver, surge protection device and terminal block shall be housed within the luminaire's control gear compartment and shall comply with the required luminaire minimum IP rating of IP65.

The control gear compartment may either form part of the complete luminaire or be attached to the luminaire.

#### **Thermal Management requirements**

The LED luminaire shall contain a passive cooling device (such as a heatsink). Active cooling devices (such as a fan) shall not be accepted. The design of the luminaire and the passive cooling device shall ensure continuous effective thermal management of all components of the luminaire to ensure that the operational performance of the luminaire in its entirety shall remain constant at the prescribed ambient operational temperature.

The rated ambient performance temperature,  $T_q$ , is defined as the maximum ambient temperature,  $T_a$ , at which a luminaire reaches the operational performance values for luminous flux and rated service life. Thus, the rated ambient performance temperature  $T_q$  shall be 25°C minimum.

The constant operational performance of the luminaire at the prescribed ambient operational temperature,  $T_a$ , may vary from the nominal operational performance of the luminaire operating at the nominal ambient performance temperature,  $T_q$  of 25°C.

The design of the luminaire and the passive cooling device should mitigate the possibility of debris being lodged in the passive cooling device that would otherwise depreciate thermal management capabilities.

The electronic driver should incorporate a thermal switch to prevent thermal generation during operation exceeding the case temperature of the electronic driver for the maximum lifetime of the luminaire.

**The Bidder shall include with this bid submission a detailed temperature testing report indicating** how the luminaire manages its temperature and the effect it has on lumen maintenance and luminaire performance. The test report shall also indicate the behaviour of the LED junction temperature,  $T_j$ , when driven at the manufacturer specified drive current.

The LED luminaire operational performance shall remain constant at the minimum and maximum ambient operational temperatures when subjected to these temperatures for a prescribed duration that shall comply with the requirements in Table 7, as relevant, prior to thermal protection devices being activated (if thermal protection devices are present in the luminaire).

The operation of the LED luminaire during the minimum and maximum ambient operational temperatures for the prescribed duration shall not reduce the rated life of the luminaire.

Table: 7

<b>Product Type</b>	<b>Ambient Operational Temperature, Ta</b>	<b>Maximum Duration</b>	<b>Year Applicable</b>
<b>All Types of LED Luminaire</b>	Minimum: – 10°C Maximum: + 35°C	As per clause 4.4 of SANS 475 (10 days)	> Or equal 2019

### Telemangement requirements

Although telemangement systems do not form part of this bid, the LED luminaire shall be designed, manufactured, tested and certified as a luminaire that shall incorporate the minimum telemangement requirements prescribed in Table 8.

The minimum requirements for telemangement integration with the luminaire shall comply with the requirements in Table 8, as relevant.

Table 8: Minimum Telemangement Requirements

<b>Product Type</b>	<b>Telemangement Readiness</b>	<b>Year Applicable</b>
Non-Dimmable LED Luminaire	No allowance shall be made for telemangement readiness.  OR  May incorporate an ANSI C136.10 twist-lock photocell receptacle (3-Pin NEMA socket) that is to be used with an ANSI C136.10 compliant photocell with IP65 rating or higher.	< 2021
Dimmable LED Luminaire	Shall incorporate a 7-Pin ANSI C136.41 twist-lock receptacle (7-Pin NEMA socket) that is to be used with an ANSI C136.10 compliant photocell or ANSI C136.41 compliant telemangement device with IP65 rating or higher.  Only the three power terminals shall be wired into the luminaire control gear to allow control by photocell.  An ANSI C136.10 compliant shorting cap with IP65 rating or higher shall be supplied and attached to the 7-Pin ANSI C136.41 twist-lock receptacle. The shorting cap shall allow the luminaire to operate normally without control.	
Non-Dimmable LED Luminaire	No allowance shall be made for telemangement readiness.  OR  May incorporate an ANSI C136.10 twist-lock	

	photocell receptacle (3-Pin NEMA socket) that is to be used with an ANSI C136.10 compliant photocell with IP65 rating or higher.	2021 less or equal to t < 2024
Dimmable LED Luminaire	<p>Shall incorporate a 7-Pin ANSI C136.41 twist-lock receptacle (7-Pin NEMA socket) that is to be used with an ANSI C136.10 compliant photocell or ANSI C136.41 compliant telemanagement device with IP65 rating or higher.</p> <p>All terminals shall be wired into the luminaire control gear to allow control by photocell or telemanagement device.</p>	

The ANSI C136.XX receptacles and nodes can be interchangeable with equivalent Zhaga Book 18, Smart interface between outdoor luminaires and sensing/communication nodes, receptacles and nodes. Adaptors shall be available from the bidder to allow ANSI C136.XX receptacles and nodes to be connected with Zhaga Book 18 receptacles and nodes and vice versa.

The receptables shall be mounted directly onto the luminaire or control gear compartment, ensuring that the IP rating of the luminaire or control gear compartment is maintained. No other interface platform and means of mounting between the luminaire and sensing/communication node shall be accepted.

**Marking**

Except as specified otherwise, the method of marking shall comply with SANS/IEC 60598-1, ANSI C136.15 – Luminaire Field Identification (Large Marker Type) or equivalent and shall be to the approval of the purchaser.

A UV-resistant, self-adhesive foil label shall be applied to the outside of the luminaire in a position readily visible and legible when the luminaire is mounted in position. The label shall identify the type and the power rating of the luminaire.

**Luminaire Maintenance**

The Bidder shall submit with this bid a luminaire maintenance method statement that shall respond to the Scope of Work and Site Information.

The method statement shall outline the Bidder’s proposed luminaire maintenance plan and indicative luminaire testing and cleaning cycle periods.

The method statement should articulate what maintenance processes are to be implemented and adhered to in order to achieve and maintain the stated performances of the luminaire proposed.

**The Bidder shall provide:**

- (a) The outline method statements for each major activity of the maintenance of the luminaire;
- (b) An indicative maintenance, cleaning and testing schedule for the luminaire; and
- (c) A description of the luminaire warranty accompanied by a warranty certificate. The period, conditions, exclusions for which the warranty is valid and means of claiming shall be stated.

The Bidder shall submit the methodology statement with their bid submission. The response shall not be more than three (3) pages (A4 size) in length, excluding supporting documentation.

**Skills Transfer**

The Bidder shall submit with this bid a skills transfer plan that shall respond to the Scope of Work and Site Information.

The method statement shall outline the Bidder’s proposed skills transfer plan. The method statement should articulate the degree of skills transfer to be provided by the Bidder.

**The Bidder shall provide:**

- (a) The outline method statements for each major activity of the skills transfer services;
  - (b) An indicative skills transfer schedule; and
  - (c) An indication of the type of qualifications or accreditation offered by the skills transfer services.
- The Bidder shall submit the methodology statement with their bid submission. The response shall not be more than five (5) pages (A4 size) in length, excluding supporting documentation.

**Schedule 1: Returnable Documents**

Bidders must ensure that the following returnable documents are submitted as indicated in Schedule 1 and that the schedule is marked clearly and submitted with the bid. Failure to submit any of the returnable documents may render the Bidder ineligible and shall not be evaluated further.

Item No	Details	Submitted
1	Schedule 2: Schedule of Technical Data	
2	Schedule 3: Lighting Design Data – Area Flood Lighting	
3	Schedule 4: Lighting Design Data – Street Lighting	
4	Luminaire Maintenance Method Statement	
5	Skills Transfer Method Statement	
6	Manufacturer’s ISO 9001 Registration Certificate (Optional)	
7	Bidder Project References	
8	SANS/IEC 60598 – 2 – 5 or Equivalent Product Safety Type Test Report	
9	SANS 475 or equivalent product performance type test report	
10	Photometric test reports	
11	LM – 79 – 19 test report	
12	LM – 80 – 08 test report	
13	LM – 80 – 15 test report (if available)	
14	Lumen depreciation curves	
15	Endurance and thermal tests reports	
16	Lighting Design Simulation of Luminaire offered	
17	IES and/or LDT files supplied in electronic format (USB Flash Drive or Compact Disc) for Luminaire offered	
18	Product technical datasheet of Luminaire	
19	Product technical datasheet of electronic driver	
20	Product technical datasheet of surge protection device	
21	Technical datasheet of Optical compartment protector	
22	Technical datasheet of Reflector Material	
23	Technical datasheet of Lens (Optic) Material	
24	Technical datasheet of Diffuser Material	
25	List of Replaceable components	
26	Product luminaire instructional installation manual	
27	Warranty Certificate	
28	Description of the compatibility to a telemanagement system	
29	Pricing Schedule (to be submitted separately for financial evaluation)	

**Schedule 2: Schedule of Technical Data**

LED luminaire – Equivalent replacement of the State Wattage & Type (e.g. 1000W HPS) existing street lighting luminaire

Bidders shall fill in Part B and Part C.

A separate schedule shall be completed for each type of LED luminaire offered for street lighting. Where street lighting is mentioned under Part A, the required specification has not been specified. Under Part B, the Bidder shall state the details of the offered specification.

Under Part C, the Bidder shall reference the supporting documentation, including page number, where the details of the offered specification for each schedule item can be found.

**Schedule 2: Schedule of Technical Data (Continued)**

Item No	Technical Details	Mandatory	Unit	Part A	Part B	Part C
				Specified	Offered	Offered Document Referenced
1	Bidder Details	√				
1.1	Name of LED Luminaire Manufacturer			XXXXXX XX	Manufacturer	Manufacturer Registration Certificate
1.2	Manufacturers ISO 9001 Registration Certificate Number and Certificate (Optional)	√		XXXXXX XX	Yes/No	
1.3	Bidder Project References with Project Value			XXXXXX XX		
1.4	Location of Luminaire Manufacturer (Country)	√		XXXXXX XX		
1.5	Luminaire Type			LED Street Lighting		
1.6	Luminaire Model Name			XXXXXX XX		
<b>2</b>	<b>Photometric Specifications</b>					
2.1	Luminaire Nominal Flux at Ta 25°C		Lm	XXXXXX XX		
2.2	Derating factor of Flux for Ta 35°C	20	%	XXXXXX XX		
				<b>Part A</b>	<b>Part B</b>	<b>Part C</b>

Item No	Technical Details	Mandatory	Unit			
				Specified	Offered	Offered Document Referenced
2.3	Is Luminaire Nominal Flux Depreciative to L70	√		XXXXXX XX	Yes/No	
2.4	Is Luminaire Nominal Flux Steady-State to L70	√		XXXXXX XX	Yes/No	
2.5	Light Output Ratio (LoR)	93	%	XXXXXX XX		
2.6	Luminaire Efficacy at Ta 25°C		Lm/ W	Table 2		
2.7	Derating factor of Efficacy for Ta 35°C	20	%	XXXXXX XX		
2.8	Colour Rendering Index (CRI)	70		Greater or equal to 70		
2.9	Correlated Colour Temperature (CCT Average)		K	Table 3		
2.10	Maximum CCT Variance	2200 - 6500	K	Plus or minus 250		
2.11	SDCM colour consistency	Less or equal to 4	Step	Less or equal to 5		
2.12	Lumen Maintenance hours for L70 at Ta 25°C		hrs	Greater or equal to 50 000 hrs		
2.13	Derating factor of Lumen Maintenance for Ta 35°C	20	%	XXXXXX XX		
2.14	Rated Life at Ta 25°C			L70B10		
<b>3</b>	<b>Electrical Specifications</b>					
3.1	Luminaire Nominal Power Rating		W	XXXXXX XX		
3.2	Minimum Energy Savings		%	40 (minimum )		

3.3	Rated Input Frequency	50	Hz	50 ± 10%		
3.4	Rated Input Voltage	230	VA C	Table 4		
3.5	Rated Input Current	500mA	A	XXXXXX XX		
3.6	Inrush Current Amplitude, I <sub>peak</sub>	√	A	XXXXXX XX		
3.7	Inrush Current Period, T <sub>width</sub>	√	μs	XXXXXX XX		
Item No	Technical Details	Mandatory	Unit	Part A	Part B	Part C
				Specified	Offered	Offered Document Referenced
3.8	Power Factor					
	a) 100% load factor	√		Table 5		
	b) 50% load factor (50% Dimmed)	√		Table 5		
3.9	Total Harmonic Distortion	√				
	a) 100% load factor	√	%	Table 5		
	b) 50% load factor (50% dimmed))	√	%	Table 5		
3.10	Efficiency		%	Table 6		
3.11	Safety Class	√		Class 1		
3.12	Electronic Driver Dimmable	1 – 10V analog dimming		Table 6	Yes/No	
3.13	Type of Dimming Control (DALI, 1-10V, PWM)	√		Table 6		
3.14	Dimming Range	√		Table 6		
3.15	Surge Protection					
	a) Open Circuit Voltage Peak, 1.2/50μs	10	kV	≥ 10		
	b) Short Circuit Current Peak, 8/20μs	10	kA	≥ 10		
3.16	Surge Protection Device Replaceable	√		XXXXXX XX	Yes/No	



3.17	Compatibility & Allowance for Telemangement System	√		Table 8	Yes/No	
<b>4 Mechanical Specification</b>						
4.1	Luminaire Housing Material	LM6 die cast marine grade		Non - Corrosive Aluminium		
4.2	Hinge pins, clips, clamps, set screws, bolts, nuts	Fasteners, 304 Grade Stainless steel		Stainless Steel (Grade 304)		
4.3	Is housing coated			XXXXXX XX	Yes/No	
	a) Colour codes available of coating	Epoxy powder		XXXXXX XX		
Item No	Technical Details	Mandatory	Unit	Part A	Part B	Part C
				Specified	Offered	Offered Document Referenced
4.4	IP Rating of Luminaire without Telemangement			≥ IP65		
4.5	IP Rating of Luminaire with Telemangement	IP65		≥ IP65		
4.6	IP Rating of Optical Compartment	IP65		≥ IP65		
4.7	IP Rating of Control Gear Compartment	IP65		≥ IP65		
4.8	4.8 IP Rating of Electronic Driver	IP65		≥ IP65		
4.9	IK Rating			≥ 08		
4.10	Luminaire Dimensions (L x W x H)	√	mm	XXXXXX XX		
	a) Length	√	mm	XXXXXX		

				XX		
	b) Width	√	mm	XXXXXX XX		
	c) Height	√	mm	XXXXXX XX		
4.11	Total Luminaire Mass	√	kg	XXXXXX XX		
4.12	Luminaire installation angle(s)	-15°- +15°	Deg	Design Data		
4.13	Luminaire includes mounting bracket for fitment onto mast	42mm spigot diameter with 2 M10 Allen Caps		Required	Yes/No	
4.14	Luminaire tilt adjustable	With marker		Required	Yes/No	
4.15	Rake Angle Indicator	√		XXXXXX XX	Yes/No	
4.16	Mounting Type	Standard		Bracket/ou treach		
4.17	Optical compartment protector material	Protected by tempered glass diffuser 4mm thickness. Compliant with Zhaga Consortium Book 15 specification		XXXXXX XX		
Item No	Technical Details	Mandatory	Unit	Part A	Part B	Part C
				Specified	Offered	Offered Document Referenced
4.18	Optical compartment protector externally exposed surface texture / gradient type	Mechanically secured through the LED module to main luminaire		Flat		
4.19	Optical compartment	Optic used, PMMA or		Required	Yes/No	

	protector UV resistant	Silicone, LOR 93%				
4.20	Colour consistency / transparency degradation of optical compartment protector for L70 lifetime	92	%	XXXXXX XX		
4.21	Reflector Material			XXXXXX XX		
4.22	Lens (Optic) Material	Zhaga Book 15 Spec		XXXXXX XX		
4.23	Diffuser Material			XXXXXX XX		
4.24	All components easily replaceable	Mandatory		Required	Yes/No	
4.25	Securing device to prevent unauthorised access	Mandatory		Required	Required	
<b>5 Thermal Management Specification</b>						
5.1	Luminaire operating temperature range	-30 – 80	°C	Table 7		
5.2	Rated operating temperature of control gear within control gear compartment for Ta of 35°C	More than 40	°C	XXXXXX XX		
<b>Item No</b>	<b>Technical Details</b>	<b>Mandatory</b>	<b>Unit</b>	<b>Part A</b>	<b>Part B</b>	<b>Part C</b>
				<b>Specified</b>	<b>Offered</b>	<b>Offered Document Referenced</b>
5.3	LED junction temperature at	95	°C	XXXXXX XXX		

	drive current, Tj (°C)					
5.4	Thermal cut-off temperature switch provided	110		XXXXXX XXX	Yes / No	
5.5	Thermal degradation on lumen maintenance	L70		XXXXXX XXX	Yes / No	
5.6	Thermal operation test report	Mandatory		Required	Yes / No	
<b>6 Spare Parts Specifications</b>						
6.1	Electronic Driver Part Number	Mandatory		XXXXXX XXX		
6.2	Electronic Driver Model Type (Name)	Mandatory		XXXXXX XXX		
6.3	Electronic Driver Make (Manufacture Name)	Mandatory		XXXXXX XXX		
6.4	LED Module Part Number	Mandatory		XXXXXX XXX		
6.5	LED Chip Make (Manufacture Name)	Mandatory		XXXXXX XXX		
6.6	Surge Protection Part Number	Mandatory		XXXXXX XXX		
6.7	Surge Protection Device Model Type (Name)	Mandatory		XXXXXX XXX		
<b>Item No</b>	<b>Technical Details</b>	<b>Mandatory</b>	<b>Unit</b>	<b>Part A</b>	<b>Part B</b>	<b>Part C</b>
						<b>Offered</b>

				Specified	Offered	Document Referenced
6.8	Surge Protection Make (Manufacture Name)	Mandatory		XXXXXX XXX		
<b>7</b>	<b>Supporting Technical Documents</b>		To be Attached			
7.1	Manufacturer's ISO 9001 Registration Certificate	√		Optional	Yes / No	
7.2	LM-79-19 test report			Mandatory	Yes / No	
7.3	LM-80-08 test report			Mandatory	Yes / No	
7.4	LM-80-15 test report	√		If Available	Yes / No	
7.5	Lumen depreciation curves report of luminaire			Mandatory	Yes / No	
7.6	SANS 475, SANS/IEC 60598-1, SANS/IEC 60598-2-5 Test Report			Mandatory	Yes / No	
7.7	SANS 475, SANS/IEC 60598-1, SANS/IEC 60598-2-5 Test Certificate			Mandatory	Yes / No	
7.8	Technical data sheet of Luminaire			Mandatory	Yes / No	
7.9	Technical data sheet of Electronic Driver	√		Required	Yes / No	
7.10	Technical data sheet of Surge Protection Device	√		Required	Yes / No	
7.11	Technical data sheet on Telemangement	√		Required	Yes / No	

	Compatibility					
7.12	Accelerated aging rated life testing report of luminaire	√		Required	Yes / No	
Item No	Technical Details	Mandatory	Unit	Part A	Part B	Part C
				Specified	Offered	Offered Document Referenced
7.13	Technical data sheet Optical compartment protector	√		Required	Yes / No	
7.14	Technical data sheet of Reflector Material	√		Required	Yes / No	
7.15	Technical data sheet of Lens (Optic) Material	√		Required	Yes / No	
7.16	Technical data sheet of Diffuser Material	√		Required	Yes / No	
7.17	Instructional Installation Manual	√		Required	Yes / No	
7.18	List of Replaceable components	√		Required	Yes / No	
7.19	Endurance and thermal tests report			Mandatory	Yes / No	
7.20	Warranty Certificate			Mandatory	Yes / No	
7.21	IES and/or LDT files (Electronic file)			Mandatory	Yes / No	
7.22	Lighting Design Simulation			Mandatory	Yes / No	
<b>8 Warranties</b>						
8.1	Luminaire Life Expectancy		hrs	50 000 (L70B10)		
8.2	Luminaire warranty		Yrs	5		

<b>9</b>	<b>Delivery</b>					
9.1	Optional - Lead Time for Delivery of Samples (from date of samples request)	√	Days	14		
9.2	Order Lead Time for Delivery (From date of order)	√	Days	XXXXXXX XXX		

**\*Note: Required information:**

√ - Means compulsory information

Mandatory – Required information

**Schedule 4: Lighting Design Data – Street Lighting**

Compliant lighting simulations and simulation reports are to be compiled for the proposed luminaire. The design criteria for the simulations are indicated below.

The simulations shall be provided in DIALux V4.13, RELUX or later simulation software versions. Hard and soft copy simulation report are to be submitted along with the readable electronic lighting simulation file, \*.DLX, and IES / LDT or equivalent photometric files. These shall all be attached to the bid submission for the proposed luminaire.

The street light poles identified for replacement with LED luminaires are spaced at an average distance of 50m (average distance between poles). The characteristic dimensions of positioning luminaires, the basic arrangement of luminaires and evaluation area shall be as defined as per SANS 10098-1:2007, represented in below.

The luminaire mounting height shall be Pole Height (9m) above ground level.

An average light loss factor (LLF) or depreciation factor of 0.75 (including dirt and lumen depreciation) shall be used for design purposes.

The optimal inclination angle of the LED luminaire will be determined by the Bidder but up to a maximum of 15°. Light-pollution and civil aviation aspects are to be taken into consideration when stating the optimal inclination angle.

The LED luminaire offered to be installed on the identified street light pole shall not result in the structural loading of the street light pole being exceeded.

**Information regarding the street light poles selected for luminaire replacement are detailed in the following annexures:**

1. **Annexure 1** - Insert Background report on audit and verification;
2. **Annexure 2** - Insert GPS position and information on street light poles selected;
3. **Annexure 3** - Insert Maps of the selected street light pole positions; and
4. **Annexure 4** - Insert Design report of existing street light poles.

**Minimum road street lighting performance requirements shall be as follows:**

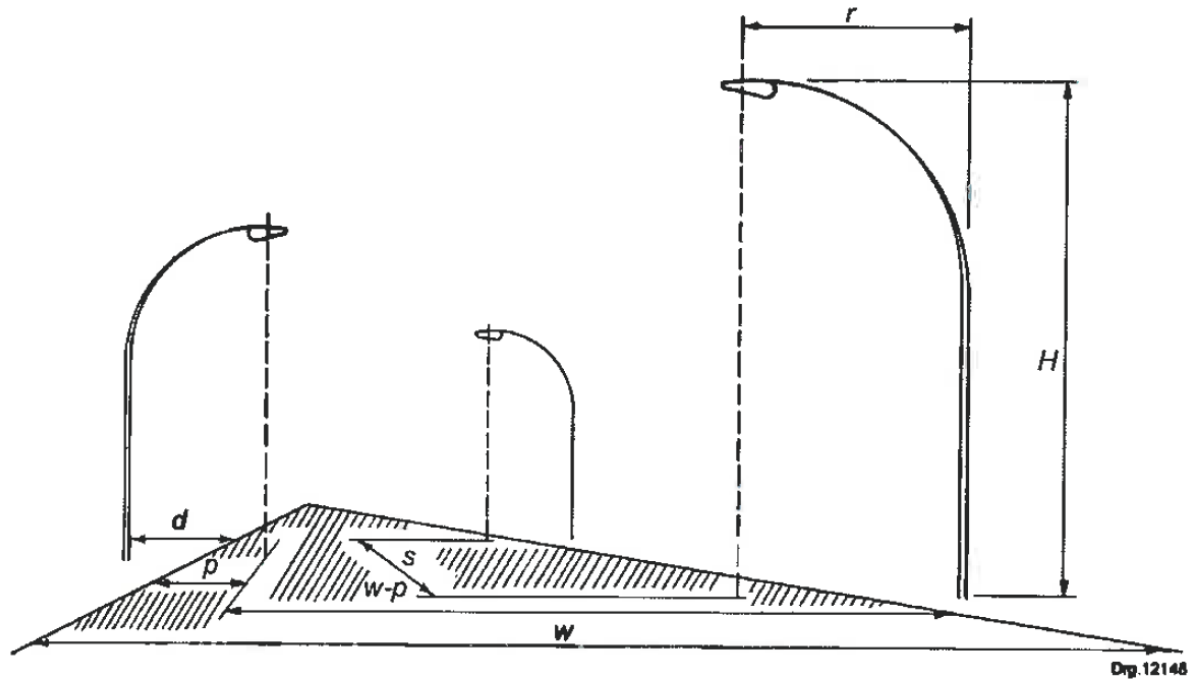
Lighting Category	Type of Street Light	Minimum Average Horizontal Illuminance (E <sub>have</sub> )	Minimum Horizontal Illuminance (E <sub>hmin</sub> )	Minimum Horizontal Illuminance Uniformity (U <sub>0</sub> , E <sub>hmin</sub> /E <sub>have</sub> )
B1	Residential	5 Lux	1 Lux	0.20

Lighting Category	Type of Road	Minimum Average	Overall Luminance	Longitudinal Luminance	Threshold Increment
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		Luminance cd/m <sup>2</sup>	Uniformity (U <sub>0</sub> )	Uniformity (U <sub>1</sub> )	(%), maximum
A2	Major Road, ≤90 km/hr	1.50	0.40	0.70	20
A3	Urban Road, ≤ 60 km/hr	1.00	0.40	0.60	20
A3	Major Residential Road, ≤ 60 km/hr	0.75	0.40	0.50	20

A lighting simulation is to be submitted for the offered luminaire. The simulation makes use of the luminaire's nominal flux at Ta 25°C. The luminaire's derated luminous flux at Ta 35°C shall be stated by the Bidder.

**Compulsory: The lights shall be supplied from the Department of Minerals and Resources (DMRE) approved suppliers**



**Figure 2. Characteristic Dimensions of Positioning Poles with Luminaires as per figure 1 of SANS 10098-1**

Where:

$H$  = Mounting height of luminaires

$s$  = Spacing between poles

$W$  = Width of carriageway surface (Kerb to kerb or edge of road surface)

$m$  = Width of longitudinal space separating the carriageways on a dual carriageway road (not shown above)

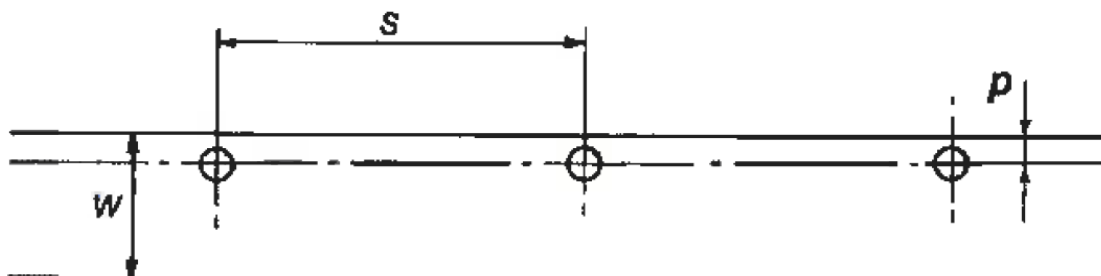


$r$  = Outreach

$p$  = Overhang, transverse distance (house side)

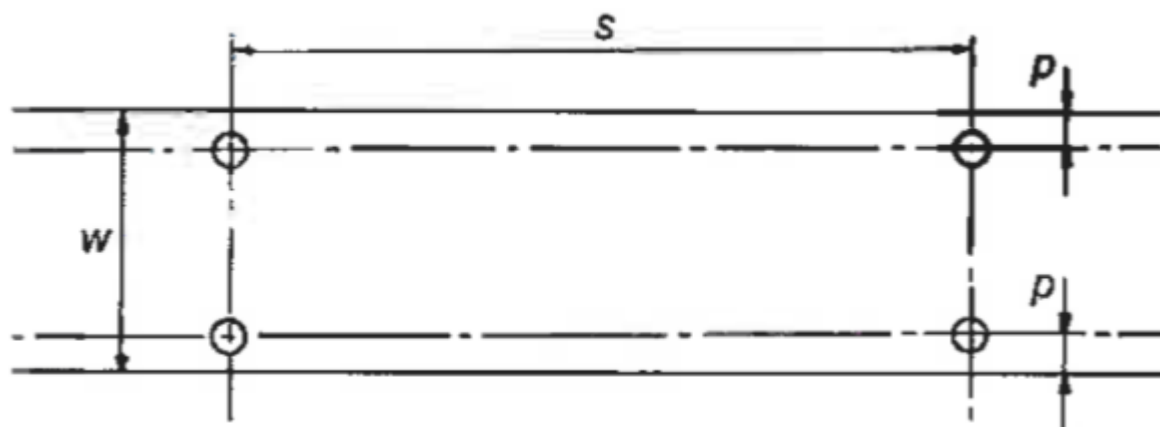
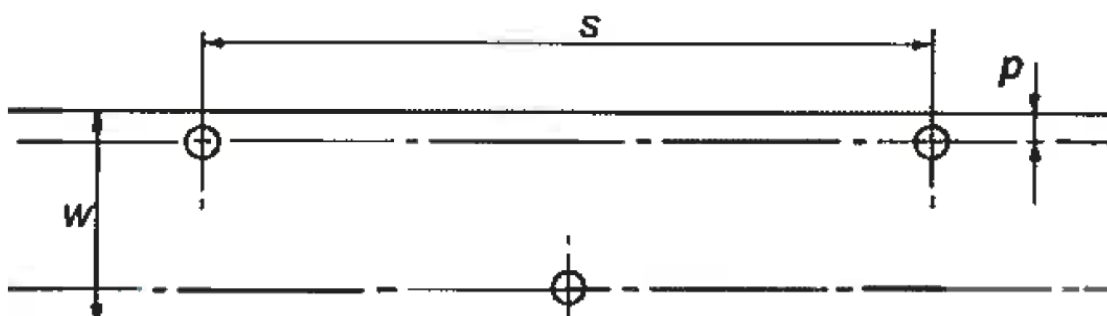
$W-p$  = Transverse distance (street side)

$d$  = Set-back from kerb line (edge of road surface)



Org.12149

### a) Single-side arrangement



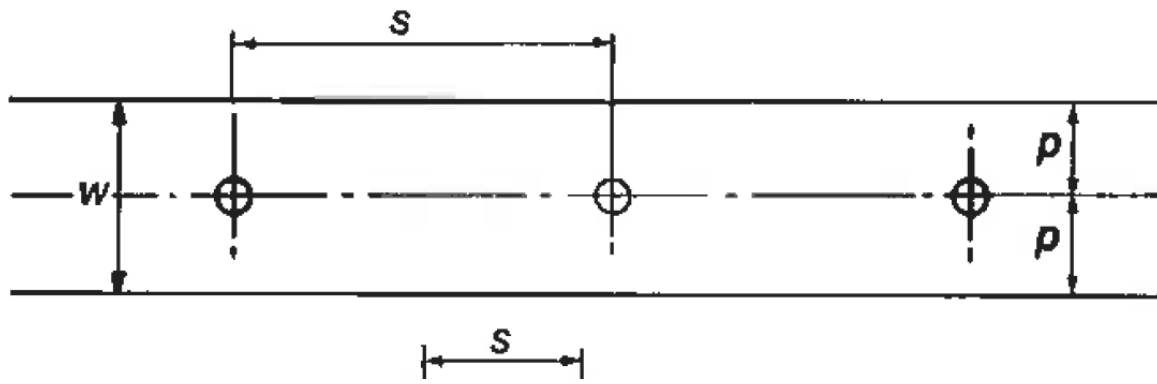


Figure: The basic arrangement of poles as extracted from figure 2 of SANS 10098 - 1

**PART A  
INVITATION TO BID**

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE</b> (NAME OF MUNICIPALITY/ MUNICIPAL ENTITY)			
BID NUMBER:	T46/2024	CLOSING DATE:	20 JANUARY 2025
CLOSING TIME:	12:00	DESCRIPTION	
SUPPLY AND DELIVERY OF LED LIGHTS			
<b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).</b>			

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS


SUPPLIER INFORMATION			
NAME OF BIDDER			
POSTAL ADDRESS			
STREET ADDRESS			
TELEPHONE NUMBER	CODE	NUMBER	
CELLPHONE NUMBER			
FACSIMILE NUMBER	CODE	NUMBER	
E-MAIL ADDRESS			
VAT REGISTRATION NUMBER			
TAX COMPLIANCE STATUS	TCS PIN:	OR	CSD No:
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3 ]
<b>TOTAL NUMBER OF ITEMS OFFERED</b>		<b>TOTAL BID PRICE</b>	R
<b>SIGNATURE OF BIDDER</b>	.....	<b>DATE</b>	
<b>CAPACITY UNDER WHICH THIS BID IS SIGNED</b>			

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		TECHNICAL INFORMATION MAY BE DIRECTED TO:	
DEPARTMENT		CONTACT PERSON	Mr V Appolis
CONTACT PERSON		TELEPHONE NUMBER	0422436400/EXT6454
TELEPHONE NUMBER		FACSIMILE NUMBER	
FACSIMILE NUMBER		E-MAIL ADDRESS	<a href="mailto:appolisv@bcm.gov.za">appolisv@bcm.gov.za</a>
E-MAIL ADDRESS			

**PART B**  
**TERMS AND CONDITIONS FOR BIDDING**

**MBD1**

<b>1. BID SUBMISSION:</b>	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	<b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR ONLINE</b>
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
<b>2. TAX COMPLIANCE REQUIREMENTS</b>	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
2.4	FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.
2.5	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.6	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.7	WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
<b>3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>	
3.1.	IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
3.2.	DOES THE ENTITY HAVE A BRANCH IN THE RSA? <span style="float: right;"><input type="checkbox"/> YES</span> <input type="checkbox"/> NO
3.3.	DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
3.4.	DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
3.5.	IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>
<b>IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.</b>	

**NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.  
NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.**

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....

DATE: .....

**PRICING SCHEDULE – FIRM PRICES**

**(PURCHASES)**

**NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED**  
**IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT**

Name of Bidder.....	Bid Number.....
Closing Time .....	Closing Date .....

UNIT	Quantity	DISCRIPTION	UNIT PRICE (EXCL.VAT)	TOTAL PRICE (EXCL.VAT)
1	20	x 90W LED Street Lights (Retrofitting 250W Sodium Vapours)		
2	40	x 240W LED Flood Lights (Retrofitting 400W Sodium Vapours)		
3	15	x 90W Indoor LED Lights (Retrofitting 250W Sodium Vapours)		
4	10	x 90W Outdoor Wall Mounted LED Lights (Retrofitting 250W Sodium Vapours)		
5	7	x 90W Parking Area LED Lights Mounted on ..... diameter poles (Retrofitting 250W Sodium Vapours)		
6		<b>TRAINING</b>		
			SUB TOTAL	
			VAT	
			TOTAL	

OFFER TO BE VALID FOR.....DAYS FROM THE CLOSING DATE OF BID.

Required by:.....

- At: .....
- Does the offer comply with the specification(s)? \*YES/NO

- If not to specification, indicate deviation(s) .....
- Period required for delivery .....

\*Delivery: Firm/Not firm

- Delivery basis .....

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

\*\* "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

\*Delete if not applicable

## SECTION 4.1 MBD4: DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state\*.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
3. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**
  - 3.1 Full Name of bidder or his or her representative: .....
  - 3.2 Identity Number:
  - 3.3 Position occupied in the Company (director, trustee, shareholder<sup>2</sup>):
  - 3.4 Company registration number:
  - 3.5 Tax Reference Number: .....
  - 3.6 VAT Registration Number: .....
  - 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
  - 3.8 Are you presently in the service of the state? **YES / NO**
    - 3.8.1 If so, furnish particulars.

\* MSCM Regulations: "in the service of the state" means to be –

- (a) a member of –
  - (i) any municipal council;
  - (ii) any provincial legislature; or
  - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

- 3.9 Have you been in the service of the state for the past twelve months? **YES / NO**  
\_\_\_\_\_

3.9.1 If so, furnish particulars.

3.10 Do you, have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.10.1 If so, furnish the following particulars:

3.11 Are you, aware of any relationship (family, friend, other) between a bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**

3.11.1 If so, furnish particulars

3.12 Are any of the company's directors, managers, principal shareholders or stakeholders in service of the state? **YES / NO**

3.12.1 If so, furnish particulars.

3.13 Are any spouse, child or parent of the company's directors, managers, principal shareholders or stakeholders in service of the state? **YES / NO**

3.13.1 If so, furnish particulars .....

3.14. Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract? **YES / NO**

3.14.1 If yes, furnish particulars: .....





## MBD 6.1

### PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

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

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

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#### 1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

#### 1.2 To be completed by the organ of state

- a) The applicable preference point system for this tender is the **80/20** preference point system.
- b) **80/20 preference point system** will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

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

- (a) Price; and
- (b) Specific Goals.

#### 1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

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

## 2. DEFINITIONS

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

## 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

### 3.1. POINTS AWARDED FOR PRICE

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

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

### 3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

#### 3.2.1. POINTS AWARDED FOR PRICE

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

**80/20**

$$Ps = 80 \left( 1 + \frac{Pt - Pmax}{Pmax} \right)$$

Where

- Ps = Points scored for price of tender under consideration  
Pt = Price of tender under consideration  
Pmax = Price of highest acceptable tender

### 4. POINTS AWARDED FOR SPECIFIC GOALS

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

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

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

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

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
RACE		5		
GENDER		5		
DISABILITY		5		
YOUTH		5		

**DECLARATION WITH REGARD TO COMPANY/FIRM**

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

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

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

..... <b>SIGNATURE(S) OF TENDERER(S)</b>	
<b>SURNAME AND NAME:</b>	.....
<b>DATE:</b>	.....
<b>ADDRESS:</b>	.....
	.....
	.....
	.....

**SECTION 4.3: MUNICIPAL RATES AND SERVICES**

Names of Directors/Partners/Senior or Managers	Physical residential address of the Director/Partner/Senior Manager	Residential Municipal Account number(s)	Name of Municipality

**NB: Please attach copy/copies of Municipal Account(s)**

**DECLARATION**

I, THE UNDERSIGNED (NAME) .....

**CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.**

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

**SECTION 4.4: AUTHORITY FOR SIGNATORY**

We, the undersigned, hereby authorize Mr / Mrs ..... acting in his/her capacity

as ..... of the business trading as ..... to sign all

documentation in connection with Tender.....

NAME OF MEMBERS / DIRECTORS	SIGNATURE	DATE
-----------------------------	-----------	------


Note: If bidders attached a copy of their Authorised Signatory is it not necessary to complete this form.



**SECTION 4.5: MBD8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES**

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
  - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
  - b. been convicted for fraud or corruption during the past five years;
  - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
  - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</p> <p><b>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</b></p> <p><b>The Database of Restricted Suppliers now resides on the National Treasury's website(<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) and can be accessed by clicking on its link at the bottom of the home page.</b></p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?</p> <p><b>The Register for Tender Defaulters can be accessed on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) by clicking on its link at the bottom of the home page.</b></p>	<p>Yes</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>
4.2.1	If so, furnish particulars:		

4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

### CERTIFICATION

**I, THE UNDERSIGNED (FULL NAME) ..... CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.**

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

.....  
**Signature**

.....  
**Date**

.....  
**Position**

.....  
**Name of Bidder**

## SECTION 4.6 MBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

1. This Municipal Bidding Document (MBD) must form part of all bids<sup>1</sup> invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).<sup>2</sup> Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
  - a. take all reasonable steps to prevent such abuse;
  - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
  - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD9) must be completed and submitted with the bid:

<sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>2</sup> Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

## CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

---

(Bid Number and Description)

in response to the invitation for the bid made by:

---

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of: \_\_\_\_\_ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
  - (a) has been requested to submit a bid in response to this bid invitation;
  - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
  - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium<sup>3</sup> will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:

- (a) prices;
- (b) geographical area where product or service will be rendered (market allocation)
- (c) methods, factors or formulas used to calculate prices;
- (d) the intention or decision to submit or not to submit, a bid;
- (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
- (f) bidding with the intention not to win the bid.

8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

Signature .....

Date .....

Position .....

Name of Bidder .....

<sup>3</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

**SECTION 5: DECLARATION**

1. I hereby declare that I have read, understood, agree and comply with all of the sections below, if included, that it shall be deemed to form and be construed as part of this agreement:

- (i) Bidding documents, viz
  - Invitation to bid;
  - Tax clearance certificate;
  - Pricing schedule(s);
  - Technical Specification(s);
  - Preference claims for Specific Goals in terms of the Preferential Procurement Regulations, 2022;
  - Declaration of interest;
  - Declaration of bidder's past SCM practices;
  - Certificate of Independent Bid Determination
  - Special Conditions of Contract;
- (ii) General Conditions of Contract; and
- (iii) Other (specify)

2. I confirm that I am duly authorised to sign this document.

NAME (PRINT) CAPACITY .....

SIGNATURE NAME OF .....

FIRM DATE .....

.....

.....

WITNESSES	
1	.....
2.	.....
DATE:	.....

## CONTRACT FORM - PURCHASE OF GOODS/SERVICES

**THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SUCCESSFUL BIDDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SUCCESSFUL BIDDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.**

### PART 1 (TO BE FILLED IN BY THE BIDDER)

1. I hereby undertake to supply all or any of the goods and/or services described in the attached bidding documents to (name of institution)..... in accordance with the requirements and specifications stipulated in bid number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the purchaser during the validity period indicated and calculated from the closing time of bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
  - (i) Bidding documents, viz
    - Invitation to bid;
    - Proof of Tax Compliance Status;
    - Pricing schedule(s);
    - Technical Specification(s);
    - Preference claim form for Preferential Procurement in terms of the Preferential Procurement Regulations;
    - Declaration of interest;
    - Declaration of bidder's past SCM practices;
    - Certificate of Independent Bid Determination;
    - Special Conditions of Contract;
  - (ii) General Conditions of Contract; and
  - (iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the goods and/or works specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) .....

CAPACITY .....

SIGNATURE .....

NAME OF FIRM .....

DATE .....

WITNESSES	
1	.....
2.	.....
DATE:	.....
.	



**CONTRACT FORM - PURCHASE OF GOODS/SERVICES**

**PART 2 (TO BE FILLED IN BY THE PURCHASER)**

- 1. I..... in my capacity as..... accept your bid under reference number .....dated.....for the supply of goods/services indicated hereunder and/or further specified in the annexure(s).
- 2. An official order indicating delivery instructions is forthcoming.
- 3. I undertake to make payment for the goods/services delivered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice accompanied by the delivery note.

<b>ITEM NO.</b>	<b>PRICE (ALL APPLICABLE TAXES INCLUDED)</b>	<b>A. <u>BRAND</u></b>	<b>DELIVERY PERIOD</b>	<b>TOTAL PREFERENCE POINTS CLAIMED</b>	<b>POINTS CLAIMED FOR EACH SPECIFIC GOAL</b>

4. I confirm that I am duly authorized to sign this contract.

SIGNED AT .....ON.....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP

**WITNESSES**

1. ....

   ....

2. ....

**CONTRACT FORM - RENDERING OF SERVICES**

**THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.**

**PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)**

7. I hereby undertake to render services described in the attached bidding documents to (name of the institution)..... in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.
  
8. The following documents shall be deemed to form and be read and construed as part of this agreement:
  - (iv) Bidding documents, viz
    - Invitation to bid;
    - Proof of tax compliance status;
    - Pricing schedule(s);
    - Filled in task directive/proposal;
    - Preference claim form for Preferential Procurement in terms of the Preferential Procurement Regulations;
    - Declaration of interest;
    - Declaration of Bidder's past SCM practices;
    - Certificate of Independent Bid Determination;
    - Special Conditions of Contract;
  - (v) General Conditions of Contract; and
  - (vi) Other (specify)
  
9. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
  
10. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
  
11. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

12. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) .....

CAPACITY .....

SIGNATURE .....

NAME OF FIRM .....

DATE .....

<b>WITNESSES</b>	
1	..... .....
2	..... .....

**CONTRACT FORM - RENDERING OF SERVICES**

**PART 2 (TO BE FILLED IN BY THE PURCHASER)**

- 4. I..... in my capacity as..... accept your bid under reference number .....dated.....for the rendering of services indicated hereunder and/or further specified in the annexure(s).
- 5. An official order indicating service delivery instructions is forthcoming.
- 6. I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

<i>DESCRIPTION OF SERVICE</i>	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	TOTAL PREFERENCE POINTS CLAIMED	POINTS CLAIMED FOR EACH SPECIFIC GOAL

4. I confirm that I am duly authorised to sign this contract.

SIGNED AT ..... ON .....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP

**WITNESSES**

1 .....

....

2 .....