

# KGETLENGRIVIER LOCAL MUNICIPALITY



## INVITATION TO BID

In terms of the Supply Chain Management Regulations (Government Gazette 27636 of 30 May 2005)  
Formal CIDB Bid Document

CONTRACT – KRLM/TEC/BID:01/2022-2023  
(CIDB 2EP)

## PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

Closing Date and Time: 30 August 2022 at 12:00

NAME OF BIDDER:		Bidder VAT registered?
TOTAL BID PRICE (Incl. VAT): (Brought forward from <b>C1.1</b> )		Yes: <input type="checkbox"/> No: <input type="checkbox"/>
N.B.: It is compulsory for all bidders to complete the above required information		

## KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT .....



N.B.: It is compulsory for all bidders to furnish the following particulars and information.  
(Failure to do so may result in your Bid being disqualified)

BID SUBMISSION INFORMATION	
<b>BIDDER:</b> (Name of Organisation)	
<b>ADDRESS:</b>	
<b>CIDB GRADING:</b>	2EP
<b>CONTACT PERSON:</b>	
<b>TEL NO.:</b>	
<b>FAX NO.:</b>	
<b>MOBILE NO.:</b>	
<b>E-MAIL ADDRESS:</b>	
<b>VAT REGISTRATION No.:</b>	
<b>TENDER VALUE: (INC. VAT.)</b>	R

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN ATTACHED? (MBD 2)

\*YES / NO  
\* Delete if not applicable

HAS A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE BEEN SUBMITTED? (MBD 6.1)

\*YES / NO  
\* Delete if not applicable

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

- ☐ An accounting officer as contemplated in the Close Corporation Act (CCA)  
☐ A verification agency accredited by the South African National Accreditation System (SANAS)  
☐ A registered auditor  
(Tick applicable box)

(A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE)

PREFERENCE POINTS CLAIMED (Where applicable)	
<b>B-BBEE RATING:</b>	LEVEL [     ]
<b>LOCAL ENTERPRISE:</b>	* YES / NO     * Delete if not applicable

**KGETLENGRIVIER LOCAL MUNICIPALITY  
CONTRACT .....**



<b>GENERAL INFORMATION</b>
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<b>BID ADVERTISED</b>	:	
<b>ESTIMATED CIDB CONTRACTOR GRADING</b>	:	2EP
<b>CLARIFICATION MEETING</b>	:	Compulsory clarification meeting will be held on: 22 August 2022 at 10:00
<b>VENUE FOR CLARIFICATION MEETING</b>	:	KGETLENGRIVIER Local Municipality, Ratsegae Main Gate
<b>CLOSING DATE</b>	:	30 August 2022
<b>CLOSING TIME</b>	:	12:00
<b>CLOSING VENUE</b>	:	Tender Box at Municipal Building, Cnr Smuts & De Wet Streets, Koster
<b>INSTRUCTIONS</b>	:	Insert the large envelope containing the Tender Documents (completed in all respects) (including C.1.1 Form of Offer) plus any additional supporting documentation into the tender box.

# KGETLENGRIVIER LOCAL MUNICIPALITY

## CONTRACT .....



Contents		
Number	Heading	Pages
<b>The Tender</b>		
<b>Part T1: Tendering Procedures</b>		
T1.1	Tender Notice And Invitation To Tender	2
T1.2	Tender Data	4
<b>Part T2: Returnable Documents</b>		
T2.1	Returnable Documents	25
<b>The Contract</b>		
<b>Part C1: Agreements and Contract Data</b>		
C1.1	Form Of Offer And Acceptance	61
C1.2	Contract Data	66
C1.3	Performance Guarantee	71
C1.3	Cost Price Adjustment	74
C1.3	Adjudication	76
C1.1	Occupational Health And Safety Agreement	77
<b>Part C2: Pricing Data</b>		
C2.1	Pricing Instructions	81
C2.2	Bill Of Quantities	82
<b>Part C3: Scope Of Work</b>		
C3.1	Scope of Work	84
C3.2	General Specification	89
C3.3	Project Specification	118
C3.4	Management	128
<b>Part C4: Site Information</b>		
C4.1	Site Information	131
<b>Part C5: Tender Drawings</b>		
C5.1	Tender Drawings	134
<b>OHS Specification (Annexure)</b>		

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## Part T1: Tendering Procedures

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		<u>Page</u>
T1.1	Tender Notice And Invitation To Tender	2
<b>Error! Reference source not found.</b>	<b>Error! Reference source not found.</b>	<b>Error! Bookmark not defined.</b>
T1.2	Tender Data	4
T1.2.1	Standard Conditions of Tender	4
T1.2.2	Variations to the Standard Conditions of Tender	14
T1.2.3	Additional Conditions of Tender	22

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### T1.1 TENDER NOTICE AND INVITATION TO TENDER

THE KGETLENGRIVIER LOCAL MUNICIPALITY INVITES TENDERS FOR CONTRACT – KRLM/TEC/BID:01/2022-2023 – PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

Bids are hereby invited from qualified and experienced Contractors for the PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE.

Service Providers are advised to submit company profiles with the following compliance requirements:

- **Founding Statement / Proof of Registration as a Legal Entity;**
- **Valid Tax Clearance Certificates (Original Documents);**
- **Company Profile – Experience, References;**
- **Certified ID Copies of Directors;**
- **Proof of residence obtainable from your Local Municipality.**
- **Proof of payment of Municipal services for both the business properties and residential properties of Directors of the company**
- **B-BBEE certificates obtained from accredited agencies by SANAS or registered auditors approved by IRBA (Independent Regulatory Board of Auditors) or in case Exempted Micro Enterprises, the B-BBEE certificate may be issued by registered Accountant as well.**

Bids will be evaluated and adjudicated in accordance with the Preferential Procurement Policy Framework Act and Preferential Procurement Regulations 2011 and 90/10 preference point system will be applied. This bid will firstly be evaluated on Functionality. Suppliers that obtain less than 60% on functionality will be regarded as non-responsive and will not be evaluated further.

Bid documents with detailed bid specifications and detailed information are obtainable at the Finance Department [Room 21] (office hours: 07h30 to 13h00 and 13h30 to 16h00) of the KGETLENGRIVIER LOCAL MUNICIPALITY, Cnr Smuts & De Wet Streets, Koster, from Thursday, 22 August 2022. A non-refundable cash deposit fee of R1 000 is required on collection of the bid documents.

All tender documents and supporting documents sealed and clearly marked with relevant bid number and tender description should be deposited in the tender box of KGETLENGRIVIER Local Municipality at Cnr Smuts & De Wet Streets, Koster before the **CLOSING DATE: 30 August 2022 at 12:00 am.**

Please note that the Municipality reserves the right, in its absolute responsibility to cancel a tender or not to award the tender to the lowest tender or any of the tenders, also note that electronic/telegraphic tenders will not be accepted.

Any queries relating to the technical specification you may be directed to:

*Project Managers: Motla Consulting Engineers (Pty) Ltd*

*Contact person: Chris Lombard, Tel No. 018 474 9000 during office hours.*

#### MUNICIPAL MANAGER

RJ Mogale

**KGETLENGRIVIER LOCAL MUNICIPALITY**

**CONTRACT KRLM/TEC/BID:01/2022-2023**

**PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF  
HIGH MAST LIGHTS IN RATSEGAE**

## KGETLENGRIVIER LOCAL MUNICIPALITY

CONTRACT – KRLM/TEC/BID:01/2022-2023

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### T1.2 TENDER DATA

Tender data is covered in two sections. T1.2.1 refers to the Standard Conditions of Tender while T1.2.32 sets out Additional Conditions of Tender.

##### T1.2.1 Standard Conditions of Tender

The conditions of tender are the Standard Conditions of Tender as contained in Standard Conditions Of Tender of Board Notice 86 of 2010 in Government Gazette No 33239 of 28 May 2010, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. ([www.cidb.org.za](http://www.cidb.org.za)). Annexure F and Table G1 of that notice are reproduced without amendment or alteration for the convenience of tenderers. (See pages 4 - 13)

(As per Board Notice 86 of 2010, Government Gazette No. 33239 of 28 May 2010)

#### Standard Conditions of Tender

- Note:
- 1 These Standard Conditions of Tender are identical to that contained in Annex F of SANS 294: 2004, Construction Procurement Processes, Procedures and Methods.
  - 2 Annex E of SANS 294, Construction Procurement Processes, Procedures and Methods, and SAICE's Practice Manual #1, The use of South African National Standards in Construction Procurement, provides guidance on referencing these Standard Conditions of Tender in procurement documents.

#### F.1 GENERAL

##### F.1.1. Actions

F.1.1.1. The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

F.1.1.2. The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note:

- 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
- 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

F.1.1.3. The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

##### F.1.2. Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.



### **F.1.3. Interpretation**

**F.1.3.1.** *The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.*

**F.1.3.2.** *These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.*

**F.1.3.3.** *For the purposes of these conditions of tender, the following definitions apply:*

a) **conflict of interest** means any situation in which :

- i) *someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;*
- ii) *an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or*
- iii) *incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.*

b) **comparative offer** means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis

c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and

d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels

e) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body

f) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

### **F.1.4. Communication and Employer's Agent**

*Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.*

### **F.1.5. The Employer's Right to Accept or Reject Any Tender Offer**

**F.1.5.1.** *The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.*

**F.1.5.2.** *The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.*

### **F.1.6. Procurement Procedures**

#### **F.1.6.1. General**

*Unless otherwise stated in the tender data, a contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.*

#### **F.1.6.2. Competitive Negotiation Procedure**

**F.1.6.2.1.** *Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.*

**F.1.6.2.2.** *All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.*

**F.1.6.2.3.** *At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.*

**F.1.6.2.4.** *The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.*

## **F.2 TENDERER'S OBLIGATIONS**

### **F.2.1. Eligibility**

**F.2.1.1.** *Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with the employer.*

**F.2.1.2.** *Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.*

### **F.2.2. Cost of Tendering**

*Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer comply with requirements.*

### **F.2.3. Check Documents**

*Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.*

### **F.2.4. Confidentiality and Copyright of Documents**

*Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.*

### **F.2.5. Reference Documents**

*Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.*

### **F.2.6. Acknowledge Addenda**

*Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.*

**F.2.7. Clarification Meeting**

*Attend, where required, a clarification meeting at which tenderers may familiarise themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.*

**F.2.8. Seek Clarification**

*Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data.*

**F.2.9. Insurance**

*Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the Contract Data. The tenderer is advised to seek qualified advice regarding insurance.*

**F.2.10. Pricing the Tender Offer**

**F.2.10.1.** *Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.*

**F.2.10.2.** *Show VAT payable by the employer separately as an addition to the tendered total of the prices.*

**F.2.10.3.** *Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the Contract Data.*

**F.2.10.4.** *State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the Contract Data may provide for part payment in other currencies.*

**F.2.11. Alterations to Documents**

*Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.*

**F.2.12. Alternative Tender Offers**

**F.2.12.1.** *Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.*

**F.2.12.2.** *Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.*

**F.2.13. Submitting a Tender Offer**

**F.2.13.1.** *Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the Contract Data and described in the Scope of Works, unless stated otherwise in the tender data.*

**F.2.13.2.** *Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.*

**F.2.13.3.** *Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.*

**F.2.13.4.** *Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which one of the signatories is the lead partner, whom the employer shall hold liable for the purpose of the tender offer.*

**F.2.13.5.** *Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.*

- F.2.13.6.** *Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked “financial proposal” and place the remaining returnable documents in an envelope marked “technical proposal”. Each envelope shall state on the outside the employer’s address and identification details stated in the tender data, as well as the tenderer’s name and contact address.*
- F.2.13.7.** *Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer’s address and identification details as stated in the tender data.*
- F.2.13.8.** *Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.*
- F.2.13.9.** *Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.*
- F.2.14.** **Information and Data to be completed in all Respects**  
*Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.*
- F.2.15.** **Closing Time**
- F.2.15.1.** *Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.*
- F.2.15.2.** *Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.*
- F.2.16.** **Tender Offer Validity**
- F.2.16.1.** *Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.*
- F.2.16.2.** *If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period, with or without any conditions attached to such extension.*
- F.2.16.3.** *Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer’s agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.*
- F.2.16.4.** *Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as “SUBSTITUTE”.*
- F.2.17.** **Clarification of Tender Offer after Submission**  
*Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.*
- Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.*
- F.2.18.** **Provide other Material**
- F.2.18.1.** *Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer’s commercial position (including notarised joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer’s request, the employer may regard the tender offer as non-responsive.*
- F.2.18.2.** *Dispose of samples of materials provided for evaluation by the employer, where required.*
- F.2.19.** **Inspections, Tests and Analysis**  
*Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.*

**F.2.20. Submit Securities, Bonds, Policies, etc.**

*If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the Contract Data.*

**F.2.21. Check Final Draft**

*Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.*

**F.2.22. Return of Other Tender Documents**

*If so instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.*

**F.2.23. Certificates**

*Include in the tender submission or provide the employer with any certificates as stated in the tender data.*

**F.3 THE EMPLOYER'S UNDERTAKINGS**

**F.3.1. Respond to Requests from the Tenderer**

**F.3.1.1.** *Unless otherwise stated in the Tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.*

**F.3.1.2.** *Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to pre-qualify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:*

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;*
- b) the new partners to a joint venture were not pre-qualified in the first instance, either as individual firms or as another joint venture; or*
- c) in the opinion of the Employer, acceptance or the material change would compromise the outcome of the prequalification process.*

**F.3.2. Issue Addenda**

*If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who drew documents.*

**F.3.3. Return Late Tender Offers**

*Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.*

**F.3.4. Opening of Tender Submissions**

**F.3.4.1.** *Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.*

**F.3.4.2.** *Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.*

**F.3.4.3.** *Make available the record outlined in F.3.4.2 to all interested persons upon request.*

**F.3.5. Two-envelope system**

**F.3.5.1.** *Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.*

**F.3.5.2.** *Evaluate the quality of the technical proposals offered by tenderers, then, advice tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the quality evaluation more than the minimum*

number of points for quality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for quality.

**F.3.6. Non-disclosure**

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

**F.3.7. Grounds for Rejection and Disqualification**

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

**F.3.8. Test for Responsiveness**

**F.3.8.1.** Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

**F.3.8.2.** A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

**F.3.9. Arithmetical Errors, Omissions and Discrepancies**

**F.3.9.1.** Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

**F.3.9.2.** Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate;
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
  - i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
  - ii) the summation of the prices.

**F.3.9.3.** Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

**F.3.9.4.** Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

**F.3.10. Clarification of a Tender Offer**

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

### **F.3.11. Evaluation of Tender Offers**

#### **F.3.11.1. General**

*Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.*

#### **F.3.11.2. Method 1: Financial Offer**

*In the case of a financial offer:*

- a) *Rank tender offers from the most favourable to the least favourable comparative offer.*
- b) *Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.*
- c) *Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.*

#### **F.3.11.3. Method 2: Financial Offer and Preference**

*In the case of a financial offer and preferences:*

- a) *Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.*
- b) *Calculate the total number of tender evaluation points ( $T_{EV}$ ) in accordance with the following formula:*

$$T_{EV} = N_{FO} + N_P$$

*where:*

- *$N_{FO}$  is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7*
- *$N_P$  is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8*

- c) *Rank tender offers from the highest number of tender evaluation points to the lowest.*
- d) *Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.*
- e) *Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.*

#### **F.3.11.4. Method 3: Financial Offer and Quality**

*In the case of a financial offer and quality:*

- a) *Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9 rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.*
- b) *Calculate the total number of tender evaluation points ( $T_{EV}$ ) in accordance with the following formula:*

$$T_{EV} = N_{FO} + N_Q$$

*where:*

- *$N_{FO}$  is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7*
- *$N_Q$  is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.*

- c) *Rank tender offers from the highest number of tender evaluation points to the lowest.*
- d) *Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.*
- e) *Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so, and the process set out in this sub clause is repeated.*

**F.3.11.5. Method 4: Financial Offer, Quality and Preferences**

*In the case of a financial offer, quality and preferences:*

- Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- Calculate the total number of tender evaluation points ( $T_{EV}$ ) in accordance with the following formula, unless otherwise stated in the Tender Data:

$$T_{EV} = N_{FO} + N_P + N_Q$$

where:

- $N_{FO}$  is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7
- $N_P$  is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.
- $N_Q$  is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- Rank tender offers from the highest number of tender evaluation points to the lowest.
- Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

**F.3.11.6. Decimal Places**

Score financial offers, preferences and quality, as relevant, to two decimal places.

**F.3.11.7. Scoring Financial Offers**

Score the financial offers of remaining responsive tender offers using the following formula:

$$N_{FO} = W_1 \times A$$

where:

- $N_{FO}$  is the number of tender evaluation points awarded for the financial offer.
- $W_1$  is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.
- $A$  is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

**Table F.1: Formulae for calculating the value of A**

Formula	Comparison aimed at achieving	Option 1 <sup>a</sup>	Option 2 <sup>a</sup>
1	Highest price or discount	$A = (1 + \frac{(P - P_m)}{P_m})$	$A = P/P_m$
2	Lowest price or percentage commission / fee	$A = (1 - \frac{(P - P_m)}{P_m})$	$A = P_m/P$
<sup>a</sup> $P_m$ is the comparative offer of the most favourable comparative offer $P$ is the comparative offer of the tender offer under consideration			

**F.3.11.8. Scoring Preferences**

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences.

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

**F.3.11.9. Scoring Quality**

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

$$N_Q = W_2 \times S_o/M_s$$

where:



- $S_o$  is the score for quality allocated to the submission under consideration;
- $M_s$  is the maximum possible score for quality in respect of a submission; and
- $W_2$  is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

**F.3.12. Insurance Provided by the Employer**

*If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the Contract Data, require the employer to provide.*

**F.3.13. Acceptance of Tender Offer**

**F.3.13.1.** *Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable commercial risk and only if the tenderer:*

- a) is not under restrictions, or has principals who are under restrictions, preventing participation in the employer's procurement,*
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,*
- c) has the legal capacity to enter into the contract,*
- d) is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,*
- e) complies with the legal requirements, if any, stated in the tender data, and*
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.*

**F.3.13.2.** *Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period. Providing the Form of Offer and Acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful tenderer as described in the Form of Offer and Acceptance.*

**F.3.14. Prepare Contract Documents**

**F.3.14.1.** *If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:*

- a) addenda issued during the tender period,*
- b) inclusion of some of the returnable documents, and*
- c) other revisions agreed between the employer and the successful tenderer.*

**F.3.14.2.** *Complete the Schedule of Deviations attached to the Form of Offer and Acceptance, if any.*

**F.3.15. Complete Adjudicator's Contract**

*Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.*

**F.3.16. Notice to Unsuccessful Tenderers**

**F.3.16.1.** *Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the Form of Offer and Acceptance before the expiry of the validity period stated in the Tender Data, or agreed additional period.*

**F.3.16.2.** *After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.*

**F.3.17. Provide Copies of the Contracts**

*Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the Form of Offer and Acceptance.*

**F.3.18. Provide Written Reasons for Actions Taken**

*Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.*

**Alpha-numeric associated with the Contractor Grading Designations**

TABLE G1: CONTRACTOR GRADING DESIGNATIONS AND ASSOCIATED PARAMETERS

<b>Contractor Grading Designation</b>	<b>Tender Value Range designation</b>	<b>Maximum Value of Contract that a Contractor is considered capable of performing (R)</b>
1 (class of construction works)	1	200 000
2 (class of construction works)	2	650 000
3 (class of construction works)	3	2 000 000
4 (class of construction works)	4	4 000 000
5 (class of construction works)	5	6 500 000
6 (class of construction works)	6	13 000 000
7 (class of construction works)	7	40 000 000
8 (class of construction works)	8	130 000 000
9 (class of construction works)	9	No limit

TABLE G2: CLASSES OF CONSTRUCTION WORK sets out detailed description of the various Designations (types) of construction work.

<b>Electrical Engineering Works – Infrastructure (EP)</b>		
<b>Definition</b>	<b>Basic Works Types</b>	<b>Examples</b>
<p>Construction Works that are primarily concerned with development, extension, installation, removal, renovation, alteration or dismantling of engineering infrastructure:</p> <p>a) Relating to the generation, transmission and distribution of electricity; or</p> <p>b) Which cannot be classified as EB</p>	<p>Electrical power generation, transmission, control and distribution equipment &amp; systems</p>	<ul style="list-style-type: none"> <li>• Power generation</li> <li>• Street &amp; area lighting</li> <li>• Substations &amp; protection systems</li> <li>• Township reticulations</li> <li>• Transmission lines</li> </ul>

**T1.2.2 Variations to the Standard Conditions of Tender**

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall take precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

The following variations, amendments and additions to the Standard Conditions of Tender shall apply to this tender.

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## **F.1 General**

### **F.1.1 Actions**

*Add the following:*

The Employer is KGETLENGRIVIER Local Municipality represented by Mr W Maluleke.

### **F.1.2 Tender Documents**

*Add the following:*

The following documents form part of this tender:

**VOLUME 1:** The General Conditions of Contract for Construction Work (First Edition) 2004 as published by the South African Institution of Civil Engineering. This publication is available and tenderers shall obtain copies at their own cost from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel (011) 805 5947, Fax: (011) 805 5971, email: [civilinfo@saice.org.za](mailto:civilinfo@saice.org.za).

**VOLUME 2:** SANS specifications as published by Standards South Africa. Publications are available and Tenderers shall obtain copies at their own cost from Standards South Africa, Private Bag X191, Pretoria 0001, Tel (012) 428 7911, Fax: (012) 344 1568, website: [www.stansa.co.za](http://www.stansa.co.za)

**VOLUME 3:** The Tender Document (this document as issued by the Employee), in which is bound:

#### **The Tender**

##### **Part T1: Tendering Procedures**

T1.1 Tender Notice And Invitation To Tender

T1.2 Tender Data

##### **Part T2: Returnable Documents**

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T2.1 Returnable Documents

#### **The Contract**

##### **Part C1: Agreements and Contract Data**

C1.1 Form of Offer and Acceptance

C1.2 Contract Data

C1.3 Performance Guarantee

C1.4 Price Adjustment

C1.5 Adjudication

C1.1 Occupational Health And Safety Agreement

##### **Part C2: Pricing Data**

C2.1 Pricing Instructions

C2.2 Bill Of Quantities

##### **Part C3: Scope Of Work**

C3.1 Scope of Work

C3.2 General Specification

C3.3 Project Specification

C3.4 Management

##### **Part C4: Site Information**

C4.1 Site Information

##### **Part C5: Drawings**

##### **OHS Specification (Annexure)**

#### **F.1.4 Communication and Employer's Agent**

*Add the following:*

Attention is drawn to the fact that verbal information, given by the Employer's Agent during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer. Only information issued formally by the Employer in writing to tenderers will be regarded as amending the Tender Documents.

The Employer's Agent is:

**Motla Consulting Engineers (Pty) Ltd**

Address           Corpus Novem Park  
                      35 Dr Yusuf Dadoo Avenue  
                      Wilkoppies  
                      Klerksdorp  
                      2571

Telephone No. 018 474 9000

Fax No.           018 468 7895

Email             info@motla.co.za

### **F.2 Tenderer's obligations**

#### **F.2.1 Eligibility**

*Add the following after F.2.1.2:*

Only those tenderers who satisfy the following criteria are eligible to submit tenders:

##### **A. Construction Industry Development Board (CIDB) Registration**

Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations, for a CE class of construction work, are eligible to have their tenders evaluated.

##### **B. Joint ventures are eligible to submit tenders provided that:**

1. every member of the joint venture is registered with the CIDB;
2. the lead partner has a contractor grading designation in the EP class of construction work;
3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Board Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a EP class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations; and
4. Page 14 reflects the alpha-numeric associated with the contractor Grading Designations.

##### **C. Supplier Database Registration**

Tenderers are required to be registered on the KGETLENGRIVIER Local Municipality's Supplier Database. (Application forms are obtainable from the Supply Chain Management Department).

#### **F.2.7 Clarification Meeting**

*Add the following:*

The arrangement for a compulsory clarification meeting is as stated in the Tender Notice and Invitation to Tender.

Tenderers should be represented at the clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

#### **F.2.10.3 This tender is not subject to contract price adjustments.**

#### **F.2.12 Alternative Tender Offers**

*Add the following after F.2.12.2:*

- A. If a tenderer wishes to submit an alternative offer, he shall do so as a separate complete offer on a separate complete set of tender documents clearly marked as an "Alternative Tender" in order to distinguish it from the unqualified tender. The only criteria permitted for such alternative tender offer is

that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.

- B. Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.
- C. Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.
- D. The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer (after adding contingencies and VAT) to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed. Tenderers are required to indicate alternative tender offers in Schedule A9: Alterations / Amendments By Tenderer in T2.1 Returnable Documents.

### F.2.13 Submitting a Tender Offer

- A. *Add the following at the end of F.2.13.3:*  
Parts of each tender offer communicated on paper shall be submitted as an original, plus 0 (nought) copies.
- B. *Add the following after the first sentence of F.2.13.4:*  
The tender shall be signed by a person duly authorised to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.
- C. *Add the following after the first sentence of F.2.13.5:*  
The employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:
  - Location of tender box** : Tender Box
  - Physical address** : KGETLENGRIVIER Local Municipality Building, Cnr Smuts & De Wet Streets, Koster
  - Identification details** : **CONTRACT – KRLM/TEC/BID:01/2022-2023**Sealed tenders with the Tenderer's name and address and the endorsement "**CONTRACT – KRLM/TEC/BID:01/2022-2023 for – PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE**" on the envelope, must be placed in the appropriate official tender box at the abovementioned address.
- D. *Add the following after F.2.13.6:*  
A two-envelope procedure as described in F.3.5 will **not** be followed.

### F.2.15 Closing Time

- F.2.15.1 *Add the following:*  
The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

### F.2.16 Tender Offer Validity

- F.2.16.1 *Add the following:*  
The tender offer validity period is 90 days

### F.2.17 Clarification of Tender Offer after Submission

- Add the following:*  
A tender may be rejected as non-responsive if the tenderer fails to provide any clarification requested by the employer, or confirmation of registration with CIDB within the time for submission stated in the employer's written request for such clarification or confirmation. A tender may be rejected if the unit rates or lump sums for some of the items in the bills/schedules of quantities are, in the opinion of the Employer,

unreasonable or out of proportion, and the tenderer fails, within the time stated in writing by the Employer to justify any specific rates or lump sums (i.e. to provide a financial breakdown of how such rates or sums were obtained) or to adjust the unit rates or lump sums for such items while retaining the total of the prices unchanged.

#### **F.2.23 Certificates**

*Add the following:*

The tenderer is required to submit the following certificates with the tender:

##### **A. Receipt of Payment**

Tenderers shall submit/append the original receipt as evidence/proof of payment for the tender documents.

##### **B. Certificate of Contractor Registration (CIDB)**

Certificate of Contractor Registration issued by the Construction Industry Development Board. Where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.

##### **C. Tax Clearance Certificate**

Tenderers shall be registered and in good standing with the South African Revenue Services (SARS) and shall submit/append documentary evidence/proof in the form of an original or certified copy of valid Tax Clearance Certificate issued by SARS. Failure to provide a valid Tax Clearance Certificate will result in the tender being rejected.

Each party to a Consortium/Joint Venture shall submit a separate Tax Clearance Certificate.

##### **D. Incorporation Certificate**

Tenderers shall submit/append documentary evidence/proof in the form of certified copies of valid Incorporation Certificates.

Each party to a Consortium/Joint Venture shall submit separate certificates/statements in the above regard.

##### **E. Identity Documents**

In the case of Sole Proprietorship, the tenderer shall submit/append a certified copy of a valid Identity Document.

##### **F. Bargaining Council Certificates**

Where applicable, a certificate of compliance issued by the relevant Bargaining Council.

Each party to a Consortium/Joint Venture shall submit separate certificates in the above regard.

##### **G. Tenders exceeding R10 million**

Where the tendered amount inclusive of VAT exceeds R10 million:

- i) audited annual financial statement for 3 years, or for the period since establishment if established during the last 3 years, if required by law to prepare annual financial statements for auditing;
- ii) a certificate certifying that the tenderer has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days;
- iii) particulars of any contracts awarded to the tenderer by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract;
- iv) a statement indicating whether any portion of the goods or services are expected to be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality or municipal entity is expected to be transferred out of the Republic.

Each party to a Consortium/Joint Venture shall submit separate certificates/statements in the above regard.

##### **H. B-BBEE VERIFICATION CERTIFICATE**

Tenderers shall provide a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the tender. Failure to do so will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

## F.3 The Employer's undertakings

### F.3.1 Respond to Requests from the Tenderer

F.3.1.1 Respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.

### F.3.4 Opening of Tender Submissions

#### F.3.4.1 Add the following:

The time and location for opening of the tender offers is:

Time : 12:00,

Date : 30 August 2022

Location : KGETLENGRIVIER Local Municipality, Cnr Smuts & De Wet Streets, Koster

Tenders will be opened immediately after the closing time for tenders at 12:00.

### F.3.8 Test for Responsiveness

Add the following after F.3.8.2:

Tenders will be considered non-responsive if:

- the tender is not in compliance with the Scope of Work;
- the tenderer has not completed and/or signed the Offer portion of C1.1 Form of Offer and Acceptance.
- the tenderer does not comply with the Contractor's CIDB grading designation specified in F.2.1.1 above.
- The tenderer has failed to clarify or submit any supporting documentation within the time for submission stated in the employer's written request.
- The tenderer has failed to provide sufficient evidence of technical experience, capable staff and plant available for the project in terms of the quality component of the adjudication.

### F.3.11 Evaluation of Tender Offers

#### F.3.11.1 General

Add the following:

The procedure for the evaluation of responsive tenders is **Method 3**, where the total number of adjudication points achieved  $T_{EV} = N_{FO} + N_Q$  as detailed below.

where:

- $N_{FO}$  is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7
- $N_Q$  is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

#### F.3.11.7 Scoring Financial Offers

Add the following:

The financial offer will be scored using **Formula 2 (Option 1)** where the value of  $W_1$  is **90** points.

#### F.3.11.8 Scoring Preferences

Add the following new sub clause:

Points will be awarded to tenderers who complete, as relevant, and include in their tender submissions, the following duly completed Referencing Schedules/Forms which are included in T2.1 Returnable Documents of the tender document as follows:

Schedule A10: Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2011 (Purchases)

The applicable conditions and points allocations are contained in each respective form

#### F.3.11.9 Scoring Quality

Add the following new sub clause:

### 1. EVALUATION

#### 1.1 TECHNICAL / FUNCTIONALITY EVALUATION

Potential service providers will have to achieve a minimum of **75 points out of 100** for their technical proposals before their financial proposals and B-BBEE status are evaluated. This is required so that there is a level of comfort that the potential service provider can deliver the project with the required professionalism and quality.

### 1.1.1 Scoring Process

The Technical / Functional Evaluation Task Team will be established to determine the following:

- Whether or not the Bidder understood the project specifications.
- The bidders experience with similar projects.
- The suitability of the bidder's proposed Plant and Equipment.
- The quality of the methodology proposed.
- The qualifications and experience of the key staff proposed.
- The suitability of Sub-Contractors proposed.
- The depth and quality of the bidder's enterprise development plans.

No alteration of technical / functionality proposals will be permitted after the deadline for receipt of bids. Questions may be asked for clarification needed to evaluate their proposals, but bidders would not be permitted to change the substance or price of their bids after bid opening. Requests for clarification and the bidder's responses would be made in writing. No interviews will be conducted in this regard.

### 1.1.2 Scoring Criteria

The score for the Technical / Functionality Evaluation will be calculated in accordance with the table below:

Item	Parameter	Max Points	Min Points	Criteria
1	Relevant Experience of projects or related (Attach completion certificates)	25	20	4 x Projects and above: =25 Points; 3x Projects above: =20 Points; 2x Projects =10 Points;
2	Proposed Methodology	15	13	Evaluation will be based on the quality of submissions.
3	Program of Works	5	2	Evaluation will be based on the quality of submissions.
4	<b>Relevant Experience of Key Personnel</b> 1x Senior Engineer/Technologist Team Leader (BEng/BTech in Electrical Engineering or similar, with ECSA and Labour Intensive Certificate NQF Level 5.	15	10	Above 3 years and above experience =10 Points; 1-2 years' experience =5 Points; ECSA registered = 5 points
	1x Technician in Electrical Engineering or similar, and Labour Intensive Certificate NQF Level 5.	10	5	3 years and above experience =10 Points; 1-2 years' experience =5 Points;
5	Companies registered within the district, (Attach Proof of Company Address)	15	10	Within District Area =15 Points; Within Province =10 Points; Outside Province =5 Points;
6	Plant Availability	15	10	1x TLB or Excavator = 7.5 Points ( Attach Proof of ownership=7.5 Points, rental agreement =5 Points 1x Cherry-picker/Sky jack/Crane truck with bucket= 7.5 Points (Attach Proof of ownership =7.5 Points, rental agreement = 5 Points)
Grand Total		100	70	



*A. Add the following after F.3.13.1:*

Tender offers will only be accepted if:

- a) the tenderer has in his or her possession an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations;
- b) the tenderer is registered with the CIDB with an appropriate category of registration;
- c) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- d) the tenderer has not:
  - i) abused the Employer's Supply Chain Management System; or
  - ii) failed to pay municipal rates and taxes or service charges and such rates, taxes and charges are in arrears for more than three months;
  - iii) failed to perform on any previous contract and has been given a written notice to this effect;
- e) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.

**F.3.17 Provide Copies of the Contracts**

*Add the following:*

The number of paper copies of the signed contract to be provided by the employer is one.

### **T1.2.3 Additional Conditions of Tender**

The additional conditions of tender are:

#### **T.1.2.3.1 Compliance with Occupational Health and Safety Act 1993**

Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2003 issued in terms of Section 43 of the Act. The tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the Tenderer shall submit with the tender, appended to Schedule B4 : Health And Safety Plan in T2.1 Returnable Documents, a detailed Health and Safety Plan in respect of the Works in order to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act and Regulations. Such Health and Safety Plan shall cover *inter-alia* the following details:

- 1) Management Structure, Site Supervision and Responsible Persons including a succession plan.
- 2) Contractor's induction training programme for employees, sub-contractors and visitors to the Site.
- 3) Health and safety precautions and procedures to be adhered to in order to ensure compliance with the Act, Regulations and Safety Specifications.
- 4) Regular monitoring procedures to be performed.
- 5) Regular liaison, consultation and review meetings with all parties.
- 6) Site security, welfare facilities and first aid.
- 7) Site rules and fire and emergency procedures.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The Contractor shall prepare and maintain a Health and Safety File in respect of the project, which shall be available for inspection on Site at all times and handed over to the Employer on Final Completion of the project.

The Contractor is required to submit to the Employer the Occupational Health and Safety Agreement (included in C1.1 of the Contract Document) and a letter of good standing from the Compensation Commissioner, or a licensed compensation insurer, within 14 days after the Commencement Date of the contract.

#### **T.1.2.3.2 Eligibility with Respect to Expanded Public Works Programme**

This Contract does not qualify for consideration as an Expanded Public Works Programme project.

#### **T.1.2.3.3 Claims Arising after Submission of Tender**

No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything shown on the Contract Drawings or contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer/Employer's Agent after the submission of any tender and the Tenderer shall be deemed to have:

- 1) Inspected the Contract Drawings and read and fully understood the Conditions of Contract.
- 2) Read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract.
- 3) Visited the site of the proposed works, carefully examined existing conditions, the means of access to the site, the conditions under which the work is to be done, and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials and plant to and from the site and made the necessary provisions for any additional costs involved thereby.
- 4) Requested the Employer or his duly authorised agent to make clear the actual requirements of anything shown on the Contract Drawings or anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Tenderer.

Before submission of any tender, the Tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the tenderer must apply to the Employer/Employer's Agent at once to have the same rectified, as

no liability will be admitted by the Employer/Employer's Agent in respect of errors in any tender due to the foregoing.

**T.1.2.3.4 Imbalance in Tendered Rates**

In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are either excessively low or high or not in proper balance with other rates or lump sums, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.

The Tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the Contract Price.

Should the Tenderer fail to amend the Tender in a manner acceptable to the Employer, the Employer may reject the Tender.

**T.1.2.3.5 Community Liaison Officer (CLO)**

The CLO must be appointed by the Contractor and will be responsible for liaison between the Contractor and the Community, with regard to labour, access, safety, etc. The CLO will be selected by the Ward Councillor and the Contractor.

An amount of R4 500.00 per month is provisionally allowed for the CLO in the schedule of quantities together with an extra-over item for the Contractor's costs, profit, etc. The Contractor must pay the CLO at the end of each month and include the amount in his progress claim for payment.

**T.1.2.3.6 Labour Intensive Construction/Use of Local Labour**

Labour Intensive Construction will not be used; however maximum use of Local Labour must be made for the components of the contract which can be reasonably completed by unskilled labour.

**T.1.2.3.7 Invalid Tenders**

Tenders shall be considered invalid and shall be endorsed and recorded as such in the tender opening record, by the responsible official who opened the tender, in the following circumstances:

- a) if the tender offer is not submitted on the Form of Offer and Acceptance bound into this tender document (form C1.1 Form of Offer and Acceptance);
- b) if the tender is not completed in non-erasable ink;
- c) if the offer has not been signed;
- d) if the offer is signed, but the name of the tenderer is not stated or is indecipherable.
- e) If the tenderer has failed to submit supporting documentation for the evaluation of quality.

**T.1.2.3.8 Negotiations with Preferred Tenderers**

The Employer may negotiate the final terms of a contract with tenderers identified through a competitive tendering process as preferred tenderers provided that such negotiation:

- a) does not allow any preferred tenderer a second or unfair opportunity;
- b) is not to the detriment of any other tenderer; and
- c) does not lead to a higher price than the tender as submitted.

Minutes of any such negotiations shall be kept for record purposes.

**T.1.2.3.9 General Supply Chain Management Conditions Applicable To Tenders**

The successful tenderer will be required to enter into a Performance Management Agreement with the employer. To this end Tenderers must complete Schedule A15: Performance Management System.

Tenderers are also required to indemnify the Employer from and against the liabilities stated in Schedule A16: KGETLENGRIVIER Local Municipality Indemnity.

Tenderers are further required to prove that their municipal services, rates and taxes are not more than three months in arrears with the relevant municipality / landlord. Schedule A17: Municipal Services, Rates and Taxes Clearance Certificate for Supply Chain Management Purposes must be duly completed.

**T.1.2.3.10 Combating Abuse of the Supply Chain Management Policy**

Tenderers are required to complete Schedule A8 : Compulsory Enterprise Questionnaire (Mbd 4) in full

**T.1.2.3.11 UIF Payments**

The Tenderer shall submit to the Employer a letter from the Department of Labour indicating his/her good standing with regard to UIF payments upon being requested to do so.

**T.1.2.3.12 Registration with Bargaining Council**

Tenderers must be registered with a relevant Bargaining Council (if such be in place) and provide the applicable Certificate of Compliance in terms of the relevant Government Gazette.

**T.1.2.3.13 Price Variations**

Refer to Clause **46.2** of Contract Data to ascertain whether Contract Price adjustment will apply to this contract.

**T.1.2.3.14 Copyright / Patent Rights**

Copyright in any document produced, and the patent rights or ownership in any plant, machinery, thing, system or process designed or devised, by a consultant in the course of the consultancy service is vested in the KGETLENGRIVIER LOCAL MUNICIPALITY.

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## Part T2: Returnable Documents

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	<u>Page</u>
Bid Declaration	26
Bid Check List	27
Returnable Documents	28
T2.1 Returnable Documents	29

## KGETLENGRIVIER LOCAL MUNICIPALITY

CONTRACT – KRLM/TEC/BID:01/2022-2023

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### **BID DECLARATION**

1. I/we Mr/Mrs/Messrs \_\_\_\_\_ duly assigned to represent the bidder for the purpose of this bid, hereby bid to supply the goods and/or render services described in the attached documents to the KGETLENGRIVIER LOCAL MUNICIPALITY on terms and conditions stipulated in this bid and in accordance with the specifications stipulated in the bid documents (which shall be taken as part of, and incorporated into this bid) at the prices reflected in the Pricing Schedule.
2. I/we agree that this offer shall remain valid for a period of **90** days commencing from the closing date and time of this bid.
3. I/We further agree that:
  - 3.1 This bid and its acceptance shall be subject to the terms and conditions contained in the in the KGETLENGRIVIER LOCAL MUNICIPALITY's Supply Chain Management Policy;
  - 3.2 if I/we withdraw my/our bid within the period for which I/we have agreed that the bid shall remain open for acceptance, or fail to fulfil the contract when called upon to do so, the KGETLENGRIVIER LOCAL MUNICIPALITY may, without prejudice to its other rights, agree to the withdrawal of my/our bid or cancel the contract that may have been entered into between me/us and the KGETLENGRIVIER LOCAL MUNICIPALITY and I/we will then pay to the KGETLENGRIVIER LOCAL MUNICIPALITY any additional expense incurred by the KGETLENGRIVIER LOCAL MUNICIPALITY having either to accept any less favourable bid or, if fresh bids have to be invited, the additional expenditure incurred by the invitation of fresh bids and by the subsequent acceptance of any less favourable bid; the KGETLENGRIVIER LOCAL MUNICIPALITY shall also have the right to recover such additional expenditure by set-off against moneys which may be due or become due to me/us under this or any other bid or contract or against any guarantee or deposit that may have been furnished by me/us or on my/our behalf for the due fulfilment of this or any other bid or contract and pending the ascertainment of the amount of such additional expenditure to retain such moneys, guarantee or deposit as security for any loss the KGETLENGRIVIER LOCAL MUNICIPALITY may sustain by reason of my/our default;
  - 3.3 If my/our bid is accepted the acceptance may be communicated to me/us by letter or order by certified mail or registered mail. Such posting shall be deemed to be proper service of such notice with effect from the date of posting/dispatch of such notice;
  - 3.4 The law of the Republic of South Africa shall govern the contract created by the acceptance of my/our bid and that I/we choose *domicilium citandi et executandi* in the Republic of South Africa, where any and all legal notices may be served at (full street address of this place):  
  
\_\_\_\_\_  
  
\_\_\_\_\_
4. I/we furthermore confirm that I/we have satisfied myself/ourselves as to the correctness and validity of my/our bid; that the price(s) and rate(s) quoted cover all the work/item(s) specified in the bid documents and that the price(s) and rate(s) cover all my/our obligations under a resulting contract and that I/we accept that any mistakes regarding price(s) and calculations will be at my/our risk.
5. I/we hereby accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me/us under this agreement as the Principal(s) liable for the due fulfilment of this contract.
6. I/we agree that any action arising from this contract may in all respects be instituted against me/us and I/we hereby undertake to satisfy fully any sentence or judgment which may be pronounced against me/us as a result of such action.
7. I/we declare that I/we have participation/no participation\* in the submission of any other offer for the supplies/services described in the attached documents. \*If in the affirmative, state name(s) of bid(s) involved.  
  
\_\_\_\_\_  
  
\_\_\_\_\_  
  
\_\_\_\_\_

Name of Bidder: \_\_\_\_\_

Signature: \_\_\_\_\_

## **BID CHECK LIST**

Bidders are to use this checklist to ensure that the bid documentation is complete for administrative compliance. The bidder is to indicate that the documentation is complete and included in the bid document by completing the table below.

Tick to indicate that the information is included

Item	Description	Yes	No	n/a
1.	Is your business registered as accredited prospective supplier with the KGETLENGRIVIER LOCAL MUNICIPALITY?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Is the bid document administration fee paid and a copy of the receipt attached to the bid document?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Did you read and understand all pages of the bid document?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Did you complete the bid documents in black ink?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Did you provide a certified copy of your company incorporation registration and VAT registration certificates?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Did you provide a certified copy of your identity document in case of sole proprietorship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Did you provide registration certificate pertaining to the relevant industry e.g. (Electrical Contractors Board), if applicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Did you provide a covering letter?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Did you provide an original and valid tax clearance certificate? (MBD2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Did you complete and sign the Bid Declaration Form? (T2.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Where applicable, is the resolution taken the Board of Directors/Members/Partners completed and signed? (section 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Where applicable, is the resolution taken the Board of Directors of a Consortium or Joint Venture completed and signed? (section 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Is invitation to bid completed and signed?(MBD 1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Is the Declaration of Interest completed and signed? (MBD 4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Is the Declaration of Bidder's Past Supply Management Practices completed and signed? (MBD 8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Is the Certificate of Independent Bid Determination completed and signed? (MBD 9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Did you complete and sign the Previous Work Experience of a Similar Nature section? (section 9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Is the Preference Points Claim Form in Terms of the Preferential Procurement Regulation 2011 completed and signed? (MBD 6.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	Did you provide an original and valid B-BBEE status level verification certificate or a certified copy thereof or, if you qualify as an EME, did you provide a verification certificate? (MBD 6.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	Does the product/service offered conform to the Bid Specifications?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Is Pricing Schedule completed? (MBD 3.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	Where applicable, is the Declaration for Procurement Above R10 million (all applicable taxes included) completed and signed? (MBD 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	Did you attach the annual financial statements as required in MBD 5? (For Procurements above R10 million)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **SCHEDULE OF CONTRACT DOCUMENTS**

The tenderer shall complete and return the documents listed below as part of his/her tender submission:

SCHEDULE	DESCRIPTION	PAGE
	Returnable Documents Required for Tender Evaluation Purposes	
<b>Schedule A</b>	<b>Documents incorporated in this tender that shall be completed and signed by all Tenderers</b>	
A1	Authority To Sign Documents	30
A2	Authority To Sign Documents (Consortium / Joint Venture)	31
A3	Clarification Meeting Certificate	32
A4	Schedule of Work Experience of Tenderer	33
A5	Schedule of Construction Plant	35
A6	Schedule of Subcontractors	36
A7	Details of Experience Of Site Agent And General Foreman	37
A8	Compulsory Enterprise Questionnaire (MBD 4)	38
A9	Alterations / Amendments By Tenderer	40
A10	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2011 (Purchases) (MBD 6.1)	41
A11	Record Of Addenda To Tender Documents	46
A12	Performance Maintenance System	47
A13	KGETLENGRIVIER Local Municipality Indemnity	48
A14	Municipal Services, Rates And Taxes Clearance Certificate For Supply Chain Purpose	49
A15	Declaration Of Bidder's Past Supply Chain Management Practices (MBD 8)	50
A16	Certificate Of Independent Bid Determination (MBD 9)	52
<b>Schedule B</b>	<b>Additional Document to be provided by the Tenderer and attached to his/her tender</b>	
B1	Certificate Of Registration Of Contractor	54
B2	Tax Clearance Certificate and Financial Statements (MBD 2)	55
B3	Preliminary Programme	56
B4	Health And Safety Plan	57
B5	Additional Functionality Documents Refer to Clause F3E.11.9 of the Tender Data	58
*	Joint Venture agreement (if applicable) – append to Schedule A3	
*	A Certificate of Contractor Registration issued by the CIDB – append to Schedule B1	
<b>Schedule C</b>	<b>Other Documents that will form part of The Contract</b>	
C1.1	Form of Offer and Acceptance (MBD 7.1 & 7.2)	60
C1.2	Contract Data	65
C1.3	Performance Guarantee	71
C1.4	Cost Price Adjustment	74
C1.5	Adjudication	76
C1.6	Occupational Health And Safety Agreement	77
C2	Pricing Data and Bill of Quantities	79
C3	Scope of Work	83
C4	Site Information	183

**NB: TENDERERS MUST COMPLETE THESE DOCUMENTS / DATA SHEETS / FORMS IN BLACK INK**



## **KGETLENGRIVIER LOCAL MUNICIPALITY**

CONTRACT – KRLM/TEC/BID:01/2022-2023

### **PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE**

#### **T2.1      RETURNABLE DOCUMENTS**

## KGETLENGRIVIER LOCAL MUNICIPALITY

CONTRACT – KRLM/TEC/BID:01/2022-2023

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A1. AUTHORITY TO SIGN DOCUMENTS (Lone Enterprise)

**RESOLUTION** of a meeting of the Board of Directors / Members / Partners of

\_\_\_\_\_  
(Enterprise full Name and Registration Number)

Held at (Place) \_\_\_\_\_ on (Date) \_\_\_\_\_

**RESOLVED THAT:**

1. The enterprise submits a Bid to the KGETLENGRIVIER LOCAL MUNICIPALITY in respect of the following project:

**CONTRACT – KRLM/TEC/BID:01/2022-2023: PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE**

2. Mr/Mrs/Ms \_\_\_\_\_

In his/her capacity as \_\_\_\_\_

And who will sign as follows:

\_\_\_\_\_  
(Specimen Signature)

Is hereby, authorised to sign the Bid and/or all other documents and/or correspondence in connection with and relating to the Bid, as well as to sign any contract, and/or all documentation resulting from the award of the bid to the enterprise mentioned above.

Note: The resolution must be signed by all the directors or members/partners of the bidding enterprise. If the space provided below should not be sufficient for all directors to sign, please provide a separate sheet, in the same format, as tabled below:

	Name	Capacity	Signature
1			
2			
3			
4			
5			

## KGETLENGRIVIER LOCAL MUNICIPALITY

CONTRACT – KRLM/TEC/BID:01/2022-2023

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A2. AUTHORITY TO SIGN DOCUMENTS (Consortium / Joint Venture)

**RESOLUTION** of a meeting of the Board of Directors / Members / Partners of

\_\_\_\_\_  
(Enterprise full Name and Registration Number)

Held at (Place) \_\_\_\_\_ on (Date) \_\_\_\_\_

**RESOLVED THAT:**

1. The enterprise submits a Bid to the KGETLENGRIVIER LOCAL MUNICIPALITY in respect of the following project:

**CONTRACT – KRLM/TEC/BID:01/2022-2023: PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE**

**As a Consortium/Joint Venture comprising** (list all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the Consortium/Joint Venture)

\_\_\_\_\_  
(Enterprise full Name and Registration Number)

\_\_\_\_\_  
(Enterprise full Name and Registration Number)

2. Mr/Mrs/Ms \_\_\_\_\_

In his/her capacity as \_\_\_\_\_

And who will sign as follows:

\_\_\_\_\_  
(Specimen Signature)

Is hereby, authorised to sign the Bid and/or all other documents and/or correspondence in connection with and relating to the Bid, as well as to sign any contract, and/or all documentation resulting from the award of the Bid to the **Consortium/Joint Venture** enterprise mentioned above.

3. The enterprise in the form of a **Consortium/Joint Venture** accept jointly and several liability with parties under item 1 above for the fulfilment of the obligations of the joint venture deriving from, and in any way connected with the contract to be entered into with the KGETLENGRIVIER LOCAL MUNICIPALITY in respect of the project described above under item 1.
4. The **Consortium/Joint venture** enterprise chooses as its *domicilium citandi et executandi* for all purposes arising from this joint venture agreement and contract with the KGETLENGRIVIER LOCAL MUNICIPALITY in respect of the project under item 1:

\_\_\_\_\_  
(Physical Address)

Note: The resolution must be signed by all the directors or members/partners of the bidding enterprise. A copy of the Joint Venture Agreement showing clearly the percentage contribution of each partner to the Joint Venture shall be appended to this Schedule.

	Name	Capacity	Signature
1			
2			
3			
4			
5			

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A3. CLARIFICATION MEETING CERTIFICATE

This is to certify that I/We\* .....

Of (tenderer) .....

.....

Of (address) .....

.....

.....

Telephone number .....

Fax number .....

Email .....

On (date) .....

Have examined the Site of the Works and its surroundings for which I/we\* am/are\* submitting this Tender and have, so far as is practicable, familiarised myself/ourselves\* with all information, risks, contingencies and other circumstances which may influence or affect my/our\* tender.

\*Delete whichever is inapplicable

**SIGNED BY/ON BEHALF OF TENDERER:**

**NAME**

**SIGNATURE**

**DATE**

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A4. SCHEDULE OF WORK EXPERIENCE OF TENDERER

Tenderers shall insert in the Schedule hereunder details of work of a similar nature to this bid successfully executed and completed (or on-going) by them in the last five (5) years. Failure to complete this Schedule will be taken to indicate that the Tenderer has no experience in this class of work.

COMPLETED CONTRACTS				
Employer (Name, Tel, Fax, Email)	Consulting Engineer (Name, Tel, Fax, Email)	Nature Of Work	Value of Work R(M)	Date Completed
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				

SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

CURRENT CONTRACTS				
Employer (Name, Tel, Fax, Email)	Consulting Engineer (Name, Tel, Fax, Email)	Nature Of Work	Value of Work R(M)	Anticipated Completion Date
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				
Name:				
Tel :				
Fax :				
Email :				

**If there is insufficient space above, the tenderer may append additional sheets.**

Number of additional sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

Representatives of the KGETLENGRIVIER LOCAL MUNICIPALITY are hereby authorized to contact the above contact persons / references of the various institutions to verify the correctness of the information as supplied.

**SIGNED BY/ON BEHALF OF TENDERER:**

**NAME**

**SIGNATURE**

**DATE**

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A5. SCHEDULE OF CONSTRUCTION PLANT

Tenderers shall state below what construction plant will be available for this Contract. The tenderer shall differentiate, if applicable, between construction plant immediately available and construction plant which will become available by virtue of outstanding orders, and indicate what further construction plant will be acquired or hired for the work should the tenderer be awarded the Contract.

CONSTRUCTION PLANT AVAILABLE				
Description	Size	Capacity	Number	When Available

CONSTRUCTION PLANT THAT WILL BE ACQUIRED / HIRED					
Description	Arrangements Made	Delivery Date	Size	Capacity	Number

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

--

NAME

--

SIGNATURE

--

DATE

## KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A6. SCHEDULE OF SUBCONTRACTORS (PLEASE READ WITH MBD 6.1) (PAGE 44 OF THIS DOCUMENT)

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

SUBCONTRACTORS			
Category/type	Subcontractor Name/Address/Contact Person/Phone/Fax/Details of Organisation/Firm/ Experience	Items of work (pay items) to be undertaken by the Subcontractor	Estimated Cost of Work (Rand)
TOTAL (Excluding VAT)			

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

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

**SIGNED BY/ON BEHALF OF TENDERER:**

--

NAME

--

SIGNATURE

--

DATE



## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A7. DETAILS OF EXPERIENCE OF SITE AGENT AND GENERAL FOREMAN

Tenderers shall set out in the Schedule hereunder details of the experience of the Site Agent and General Foreman in work of a similar nature to that for which this Tender is submitted.

Failure to complete this Schedule may result in the Tender not being considered.

SITE AGENT				
NAME			NQF LEVEL	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

GENERAL FOREMAN				
NAME			NQF LEVEL	
Contract and Client	Nature Of Work	Position Held	Value Of Work	Year Completed

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

**SIGNED BY/ON BEHALF OF TENDERER:**

--

NAME

--

SIGNATURE

--

DATE

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A8. COMPULSORY ENTERPRISE QUESTIONNAIRE (MBD 4)

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 and/or take an oath declaring his/her interest.

\* 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. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid:

3.1 Full Name: .....

3.2 Identity Number: .....

3.3 Company Registration Number: .....

3.4 Tax Reference Number: .....

3.5 VAT Registration Number: .....

3.6 Are you presently in the service of the state

\*YES / NO

3.6.1 If so, furnish particulars.

\* Delete if not applicable

.....  
.....

3.7 Have you been in the service of the state for the past twelve months

\*YES / NO

3.7.1 If so, furnish particulars.

\* Delete if not applicable

.....  
.....

3.8 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

3.8.1 If so, furnish particulars.

\* Delete if not applicable

.....  
.....

3.9 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  
\* Delete if not applicable

3.9.1 If so, furnish particulars

.....  
.....

3.10 Are any of the company's directors, managers, principal shareholders or stakeholders in service of the state? \*YES / NO  
\* Delete if not applicable

3.10.1 If so, furnish particulars.

.....  
.....

3.11 Are any spouse, child or parent of the company's directors, managers, principal shareholders or stakeholders in service of the state? \*YES / NO  
\* Delete if not applicable

3.11.1 If so, furnish particulars.

.....  
.....

#### CERTIFICATION

I, THE UNDERSIGNED (NAME)

.....

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

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

#### SIGNED:

ENTERPRISE NAME

DATE

NAME

POSITION

SIGNATURE

#### SIGNED BY/ON BEHALF OF TENDERER:

NAME

SIGNATURE

DATE

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A9. ALTERATIONS / AMENDMENTS BY TENDERER

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

If no deviations or modifications are desired, the Schedule hereunder is to be marked NIL and signed by the Tenderer.

No alternative Tender will be considered unless a Tender free of qualifications and strictly on the basis of the Tender Documents is also submitted.

PAGE/ITEM	CLAUSE/DESCRIPTION

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

SIGNED BY/ON BEHALF OF TENDERER:

--

NAME

--

SIGNATURE

--

DATE

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

### A10.PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011 (PURCHASES) (MBD 6.1)

*This preference form must form part of all bids invited for the sale and letting of assets. It contains general information and serves as a claim form for B-BBEE Status Level of Contribution.*

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE BROAD BASED BLACK ECONOMIC EMPOWERMENT, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011.**

#### 1. GENERAL CONDITIONS

1.1 The following preference point system are applicable to all bids:

- the 80/20 system for requirements not exceeding R1 000 000-00 (all applicable taxes included); and;
- the 90/10 system for requirements exceeding R1 000 000-00 (all applicable taxes included); and.

1.2 The value of this bid is estimated to exceed R1 000 000 (all applicable taxes included) and therefore the 90/10 system shall be applicable.

1.3 Preference points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contribution.

1.3.1 The maximum points for this bid are allocated as follows:

1.3.1.1 PRICE \_\_\_\_\_ 90 \_\_\_\_\_

1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION \_\_\_\_\_ 10 \_\_\_\_\_

**Total points for Price and B-BBEE must not exceed 100**

1.4 Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5. The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

#### 2. DEFINITIONS

2.1 “all applicable taxes” includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;

2.2 “B-BBEE” means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;

2.3 “B-BBEE status level of contributor” means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

2.4 “bid” means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state

- for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- 2.5 **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 **“comparative price”** means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 **“consortium or joint venture”** 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;
- 2.8 **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 **“EME”** means any enterprise with an annual total revenue of R5 million or less.
- 2.10 **“Firm price”** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 **“functionality”** means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 **“non-firm prices”** means all prices other than “firm” prices;
- 2.13 **“person”** includes a juristic person;
- 2.14 **“rand value”** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.15 **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 **“total revenue”** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;
- 2.17 **“trust”** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.18 **“trustee”** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

### **3. ADJUDICATION USING A POINT SYSTEM**

- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

### **4. POINTS AWARDED FOR PRICE**

#### **4.1 THE 90/10 PREFERENCE POINT SYSTEMS**

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

$$P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

$P_s$  = Points scored for comparative price of bid under consideration

$P_t$  = Comparative price of bid under consideration

$P_{\min}$  = Comparative price of lowest acceptable bid

## 5. **POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION**

- 5.1 In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Points claimed (please tick)
1	10	
2	9	
3	8	
4	5	
5	4	
6	3	
7	2	
8	1	
Non-compliant contributor	0	

- 5.2 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.
- 5.3 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- 5.8 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

## 6. **BID DECLARATION**

- 6.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

**7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1**

7.1 B-BBEE Status Level of Contribution: = \_\_\_\_\_ (maximum of 10 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).

**8 SUB-CONTRACTING**

8.1 Will any portion of the contract be sub-contracted? **YES / NO (delete which is not applicable)**

8.1.1 If yes, indicate: (See section A6 – Page 36)

(i) what percentage of the contract will be subcontracted? \_\_\_\_\_%

(ii) the name of the sub-contractor? \_\_\_\_\_

(iii) the B-BBEE status level of the sub-contractor? \_\_\_\_\_

(iv) whether the sub-contractor is an EME? **YES / NO (delete which is not applicable)**

**9 DECLARATION WITH REGARD TO COMPANY/FIRM**

9.1 Name of firm: \_\_\_\_\_

9.2 VAT registration number: \_\_\_\_\_

9.3 Company registration number : \_\_\_\_\_

9.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited

**[TICK APPLICABLE BOX]**

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

**[TICK APPLICABLE BOX]**



9.7 MUNICIPAL INFORMATION

Municipality where business is situated: \_\_\_\_\_

Registered Account Number: \_\_\_\_\_

Stand Number: \_\_\_\_\_

9.8 TOTAL NUMBER OF YEARS THE COMPANY/FIRM HAS BEEN IN BUSINESS?

\_\_\_\_\_

9.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBEE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we 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 paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
  - (a) disqualify the person from the bidding 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) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, 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

WITNESSES:

1. \_\_\_\_\_

2. \_\_\_\_\_

DATE: \_\_\_\_\_

**SIGNATURE(S) OF BIDDER(S)**

**KGETLENGRIVIER LOCAL MUNICIPALITY  
CONTRACT.....**

**PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF  
HIGH MAST LIGHTS IN RATSEGAE**

**A11. RECORD OF ADDENDA TO TENDER DOCUMENTS**

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

No.	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

If there is insufficient space above, the tenderer may append additional sheets.

Number of additional sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

**SIGNED BY/ON BEHALF OF TENDERER:**

--

--

--

---

NAME	SIGNATURE	DATE
------	-----------	------

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## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A12. PERFORMANCE MANAGEMENT SYSTEM

The Municipal Finance Management Act (No. 56 of 2003) Section 116 (2) (d) determines that a Municipality must enter into a Performance Management System (PMS) with all service providers.

An assignment specific PMS has been drafted and needs to be signed by the appointed signatory as part of this tender document and the costing for this project will run during the 2015/2016 financial budget year.

#### ACCEPTANCE OF PMS AGREEMENT

You are hereby requested to sign this document as acceptance of the agreement. Failure to sign this document will lead to disqualification.

#### CONTRACTOR

**SIGNATURE**

**NAME**

**DESIGNATION**

**DATE**

#### KGETLENGRIVIER LOCAL MUNICIPALITY

**SIGNATURE**

**NAME**

**DESIGNATION**

**DATE**

## KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A13. KGETLENGRIVIER LOCAL MUNICIPALITY INDEMNITY

1. The Contractor hereby agrees to indemnify, hold harmless and defend KGETLENGRIVIER Local Municipality and their officers, employees, agents and representatives, from and against the following liabilities arising as a result of the execution of the work:
  - 1.1 Any liability with regard to claims by governmental authorities or others for non-compliance by Contractor of any Act of Parliament, law, ordinance, regulation or by-law made by a lawful authority provided that such compliance therewith was required for the execution of the Contract or at Law.
  - 1.2 Any liability arising from actual or alleged public or private nuisance arising out of negligent acts or omissions to act of Contractor or its Subcontractors, or of their employees.
  - 1.3 Any liability arising from loss or damage to Contractor and/or Subcontractor's equipment and their other property on site.
  - 1.4 Any liability arising from claims with regard to the death of/or injury or sickness or disease to Contractor' employees or the death of/or injury or sickness or disease to third parties.
  - 1.5 Any liability arising from any loss of/or damage to property belonging to a third party.
  - 1.6 Any liability arising from actual or asserted infringement or improper appropriation or use of patents, copyrights, proprietary information or know- how in respect of the work designed by/or under the responsibility of the Contractor.
  - 1.7 Any liability arising from the death or injury or loss or damage to property of third parties or KGETLENGRIVIER Local Municipality's property as a result of the negligent acts or omissions of contractors or its subcontractor's employees.
  - 1.8 Contractor shall indemnify KGETLENGRIVIER Local Municipality against all claims, proceedings, damages and costs of whatsoever nature arising out of contravention of environmental legislation.

I, \_\_\_\_\_ the undersigned (duly authorised to sign) hereby declare that I have read and understood the abovementioned and agree to all the above.

<b>COMPANY:</b>	
<b>ADDRESS:</b>	
<b>TEL:</b>	
<b>CELL:</b>	

**SIGNED BY/ON BEHALF OF TENDERER:**

--

**NAME**

--

**SIGNATURE**

--

**DATE**

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A14. MUNICIPAL SERVICES, RATES AND TAXES CLEARANCE CERTIFICATE FOR SUPPLY CHAIN PURPOSE

The purpose of this form is to obtain proof that municipal services, rates and taxes of the service provider are not more than three months in arrears with the relevant municipality / landlord in the municipal area where the service provider conduct his / her business. **This form is to be completed only if the service provider's rates and taxes are not in arrears for more than three months. Bidders to attach a copy of the latest rate and taxes account of the relevant local authority not older than three months.**

**PART A** – to be completed by the relevant municipality in the case where the service provider is the registered owner of the site / owner pays for municipal services / tenant pays for municipal services

**OR**

**PART B** – to be completed by the landlord in the case where the service provider is renting the premises / rental paid by tenant include municipal services.

<b>PART A (TO BE COMPLETED BY THE LOCAL AUTHORITY)</b>	
Name of the Municipality:	
Property Physical Address:	
Registered Name:	
Official's Name: _____	Municipality Stamp Here
Signature : _____	
Date: _____	
<b>Please indicate whether company/owner in arrears or up-to-date</b>	
Rates and taxes : Up-to-date/in arrears for more than 3 months	
Water:	Up-to-date/in arrears for more than 3 months
Electricity:	Up-to-date/in arrears for more than 3 months
Refuse :	Up-to-date/in arrears for more than 3 months
Other services:	Up-to-date/in arrears for more than 3 months
<b>PART B ( TO BE COMPLETED BY THE LANDLORD)</b>	
Name of the Landlord:	
Property Physical Address:	
Landlord Signature:	
Date: _____	
Landlord's business stamp here	
Or an Affidavit from SAPS in the event the landlord does not have a business stamp)	
<b>Please tick whether up-to-date or in arrears</b>	
Rental:	Up-to-date/ in arrears for more than 3 months
Municipal services:	Up-to-date/ in arrears for more than 3 months

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A15. DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (MBD 8)

- 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. wilfully 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><b>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?</b></p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p><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>	Yes <input type="checkbox"/>	No <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>	Yes <input type="checkbox"/>	No <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:		
<b>Item</b>	<b>Question</b>	<b>Yes</b>	<b>No</b>
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**



## KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### A16. CERTIFICATE OF INDEPENDENT BID DETERMINATION (MBD 9)

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 *per 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 (MBD 9) must be completed and submitted with the bid.
6. I, the undersigned, in submitting the accompanying bid, **CONTRACT.....: Supply, installation and commissioning of High Mast Lighting in Mazista and Reagile Extension 8**, in response to the invitation for the bid made by **KGETLENGRIVIER Local Municipality**, do hereby make the following statements that I certify to be true and complete in every respect.

I certify, on behalf of: \_\_\_\_\_  
(Name of Bidder)

that:

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

<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.

- (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

## KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### B1. CERTIFICATE OF REGISTRATION OF CONTRACTOR

##### CIDB Contractor Registration Certificate

A Certificate of Contractor's Registration issued by the Construction Industry Development Board (CIDB) shall be attached to this page.

Where a tenderer satisfies CIDB Contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.

SIGNED BY/ON BEHALF OF TENDERER:

--

NAME

--

SIGNATURE

--

DATE

## KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### B2. TAX CLEARANCE CERTIFICATE AND FINANCIAL STATEMENTS

An **original** valid Tax Clearance Certificate from the South African Revenue Service (SARS) shall be attached to this page.

**It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.**

- 1 In order to meet this requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- 2 SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3 The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5 Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website [www.sars.gov.za](http://www.sars.gov.za).
- 6 Applications for the Tax Clearance Certificates 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](http://www.sars.gov.za).

**SIGNED BY/ON BEHALF OF TENDERER:**

NAME

SIGNATURE

DATE

## KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### B3. PRELIMINARY PROGRAMME

The tenderer shall attach a preliminary programme, to this page.

This programme shall be in the form of a bar chart (Gantt chart) or similar acceptable time/activity form reflecting the proposed sequence and rate of progress of the various activities and the quantities that will be carried out every week under each of the elements, comprising the work for this contract. The programme shall also indicate the point where the tenderer intends to commence work operations and the direction in which the work will proceed. The working hours shall be indicated.

**Details of the preliminary programme shall be appended to this Schedule.**

Number of sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

**SIGNED BY/ON BEHALF OF TENDERER:**

--

**NAME**

--

**SIGNATURE**

--

**DATE**

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### B4. HEALTH AND SAFETY PLAN

Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2003 issued in terms of Section 43 of the Act. The tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the tenderer shall prepare and attach a Health and Safety Plan in respect of the Works in order to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act and Regulations. Such Health and Safety Plan shall cover inter-alia the following details:

- 1) Management Structure, Site Supervision and Responsible Persons including a succession plan.
- 2) Contractor's induction training programme for employees, sub-contractors and visitors to the Site.
- 3) Health and safety precautions and procedures to be adhered to in order to ensure compliance with the Act, Regulations and Safety Specifications.
- 4) Regular monitoring procedures to be performed.
- 5) Regular liaison, consultation and review meetings with all parties.
- 6) Site security, welfare facilities and first aid.
- 7) Site rules and fire and emergency procedures.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The tenderer shall also take into account the additional requirements stated in the Scope of Work when drawing up the Health and Safety Plan for the contract.

**Details of the Health and Safety Plan shall be appended to this Schedule.**

Number of sheets appended by the tenderer to this Schedule ..... (If nil, enter NIL)

**SIGNED BY/ON BEHALF OF TENDERER:**

--

NAME

--

SIGNATURE

--

DATE

**KGETLENGRIVIER LOCAL MUNICIPALITY  
CONTRACT.....**

**PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF  
HIGH MAST LIGHTS IN RATSEGAE**

**B5. ADDITIONAL FUNCTIONALITY DOCUMENTS**

Tenders shall attach the functionality supporting documentation as outlined in F.3.11.9 of the tender data to this page.

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## Part C1: Agreements and Contract Data

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	<b><u>Page</u></b>
C1.1 Form Of Offer And Acceptance	61
C1.2 Contract Data	66
C1.3 Performance Guarantee	72
C1.3 Cost Price Adjustment	72
C1.5 Adjudication	76
C1.1 Occupational Health And Safety Agreement	78



## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

## C1.1. Form of Offer and Acceptance

### Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works: **CONTRACT – KRLM/TEC/BID:01/2022-2023: PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE**

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

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data, within 4 months of the commencement date.

#### THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

.....  
..... RAND (in words);

R ..... (in figures)

This offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

#### SIGNED ON BEHALF OF/BY THE TENDERER:

--

NAME

--

SIGNATURE

--

CAPACITY

--

DATE

#### Name and address of Organisation:

.....  
.....  
.....

#### SIGNED BY WITNESS:

--

NAME

--

SIGNATURE

--

DATE

## Acceptance

*By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the tenderer's offer shall form an Agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.*

The terms of the contract are contained in:

- Part C1: Agreements and Contract Data (which includes this Agreement)
- Part C2: Pricing Data
- Part C3: Scope Of Work
- Part C4: Site Information
- Part C5: Tender Drawings

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto as listed in the Returnable Documents as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this schedule which must be duly signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), or when or just after this Agreement comes into effect, contact the employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

### SIGNED ON BEHALF OF/BY THE EMPLOYER:

NAME

SIGNATURE

CAPACITY

DATE

### SIGNED BY WITNESS:

NAME

SIGNATURE

DATE

## Schedule of Deviations

### Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of Offer and Acceptance, the outcome of such Agreement shall be recorded here.
3. Any other matter arising from the process of Offer and Acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the Contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above Agreements and recorded here shall also be incorporated into the final draft of the Contract.

1. Subject .....  
Details .....  
.....  
.....  
.....
2. Subject .....  
Details .....  
.....  
.....  
.....
3. Subject .....  
Details .....  
.....  
.....  
.....
4. Subject .....  
Details .....  
.....  
.....  
.....
5. Subject .....  
Details .....  
.....  
.....  
.....

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Returnable Documents, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

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

**SIGNED ON BEHALF OF/BY THE TENDERER:**

<div></div>	<div></div>
<b>NAME</b>	<b>SIGNATURE</b>
<div></div>	<div></div>
<b>CAPACITY</b>	<b>DATE</b>

**SIGNED BY WITNESS:**

<div></div>	<div></div>	<div></div>
<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

**SIGNED ON BEHALF OF/BY THE KGETLENGRIVIER LOCAL MUNICIPALITY:**

<div></div>	<div></div>
<b>NAME</b>	<b>SIGNATURE</b>
<div></div>	<div></div>
<b>CAPACITY</b>	<b>DATE</b>

**SIGNED BY WITNESS:**

<div></div>	<div></div>	<div></div>
<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>

## CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the ..... (day) of ..... (month) ..... (year)

at ..... (place)

### SIGNED ON BEHALF OF/BY THE CONTRACTOR:

NAME

SIGNATURE

CAPACITY

### SIGNED BY WITNESS:

NAME

SIGNATURE

## **KGETLENGRIVIER LOCAL MUNICIPALITY CONTRACT.....**

### **PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE**

## **C1.2. Contract Data**

### **Part 1: Contract Data Provided by the Employer**

#### **GENERAL CONDITIONS OF CONTRACT**

The following standardised General Conditions of Contract:

#### **General Conditions of Contract for Construction Works (First Edition, 2004)**

Prepared by the South African Institution of Civil Engineering (SAICE) shall apply to and forms the General Conditions of Contract for this contract. Copies of these Conditions of Contract are obtainable from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, email:civilinfo@saice.org.za.

Copies of the General Conditions of Contract are available for inspection and scrutiny at the offices of the Engineer.

The General Conditions of Contract 2004 make references to the Contract Data for specific data, which, together with these conditions, collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Specific Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

The General Conditions of Contract shall be read in conjunction with the variations, amendments and additions set out in the Contract Specific Data below. Each item of data given is cross-referenced to the Clause in the General Conditions of Contract to which it mainly applies.

#### **CONTRACT SPECIFIC DATA**

The following Contract specific data are applicable to this Contract:

#### **Clause 1.1.11: Defects Liability Period**

The defects liability period is a period of 1 calendar year, measured from the date of the Certificate of Completion.

#### **Clause 1.1.13: Due Completion Date**

The date for achieving Practical Completion is a date 4 months after the Commencement Date.

#### **Clause 1.1.14: Employer**

The **Employer** is KGETLENGRIVIER Local Municipality, represented by Mr L Moinwe and/or such person or persons duly authorised thereto by the Employer in writing and the legal successors in title of this person and are referred to in this Contract Document as “Employer”.

#### **Clause 1.1.15: Engineer**

The **Engineer**, referred to in the documents, is the firm of Consulting Engineers, Motla Consulting Engineers (Pty) Ltd acting through a Director, an Associate or an official authorised thereto in writing.

The name of the Engineer is: Motla Consulting Engineers (Pty) Ltd or their successors duly appointed by the Employer.

#### **Clause 1.1.19: Scope of Work**

*Replace with the following:*

“**Scope of Work**” means the document(s) containing the Standard Specifications, the Project Particular Specifications and the Drawings, that specify and describe the Works which are to be provided, and any other requirements and constraint relating to the manner in which the work is to be carried out.

**Clause 1.1.24: Writing**

**Add the following Clause after Clause 1.1.24**

**1.1.25 “Drawings”** means all drawings, calculations and technical information forming part of the Tender Documents (other than information contained in the Specifications) and any modifications thereof or additions thereto from time to time approved in writing by the Engineer or delivered to the Contractor by the Engineer.

**Clause 1.2.2: Notices**

The name of the Employer is : KGETLENGRIVIER Local Municipality

The address of the Employer is : Cnr Smuts & De Wet Streets,  
Koster

The name of the Engineer is : Motla Consulting Engineers (Pty) Ltd

The address of the Engineer is : Corpus Novem Park  
35 Dr Yusuf Dadoo Avenue  
Wilkoppies  
Klerksdorp

**Clause 2.3: Employer’s Approval Required**

The Engineer is required to obtain the specific approval of the Employer before executing any of the following functions or duties:

1. Nominating the Engineer’s Representative in terms of Clause 2.4.
2. Delegation of Engineer’s authority in terms of Clause 2.7.
3. Providing consent for subcontracting part of the contract in terms of Clause 6.
4. The issuing of instructions for dealing with fossils and the like in terms of Clause 15.
5. The issuing of an instruction to accelerate progress in terms of Clause 40.
6. Granting permission to work during non-working times in terms of Clause 38.1.
7. The issuing of further drawings or instructions in terms of Clause 13
8. Suspend the progress of the works in terms of Clause 39.1.
9. The approval of any extension of time for completion in terms of Clause 42.
10. The reduction of a penalty for delay in terms of Clause 43.2.
11. The issuing of a variation order in terms of Clause 36.2.
12. Issuing of instructions to carry out work on a day work basis in terms of Clause 37.1.
13. The determination of additional or reduced costs arising from changes in legislation in terms of Clause 46.4.
14. The agreeing of the adjustment of the sums for general items in terms of Clause 50.
15. Authorizing the Contractor to repair and make good excepted risks in terms of Clause 32.2.
16. The giving of a ruling on a contractor’s claim in terms of Clause 48.5.
17. The agreeing of an extension to the 28-day period in terms of Clause 48.5.1.
18. The inclusion of credits in the next payment certificate in terms of Clause 48.5.2.

**Clause 4: Basis of Contract**

*Add the following Clauses after Clause 4.5.2:*

- 4.6 The Employer and the Contractor shall enter into an agreement to complete the work required for the construction of the works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (No. 85 of 1993) and the Construction Regulations promulgated thereunder, as well as any further requirements stipulated in this contract document.
- 4.7 The Contractor shall provide proof to the Employer, within 14 days of the Commencement Date, that he/she has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act (Act No. 130 of 1993).

**Clause 7.1: Security**

The Deed of Guarantee is to be delivered to the Employer within 14 days of the Commencement Date.  
The Performance Guarantee shall be worded as set out in the document included in C1.3.  
The liability of the guarantee shall be for 10% of the Contract Price.

**Clause 9.1: Contractor's Copyright**

*Add the following to Clause 9.1:*

No part of any document or drawings issued with this enquiry may be copied, photographed or repeated in any manner or by any process without the written consent of the Engineer. Copyright is reserved on all designs, specifications, patents and patentable designs, systems and processes contained in the documents and drawings.

The person, firm, or body to whom these documents are issued or made available shall be held jointly and severally responsible in their personal and corporate capacities for any contravention of the requirements of Clause 9.1. The recipients of these documents shall treat the documents as well as the details contained herein as private and confidential.

**Clause 10: Commencement of Works**

The Contractor shall commence executing the Works within 14 days from the Commencement Date.

Notwithstanding the above, the Contractor will not be permitted to commence executing the Works before the Form of Guarantee and required insurances and other specified items have been submitted and approved.

**Clause 11: Access to the Site**

*Add the following clause after Clause 11.2:*

- 11.2.1 The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his/her own cost any additional facilities outside the Site required by him/her for the purposes of the Works.

**Clause 12.2: Programme of Works**

The Contractor shall deliver the programme of work within 14 days of the Commencement Date. The programme shall clearly show the order in which the Contractor proposes to carry out the work, including the critical path, the proposed rate of progress and a linked cash flow forecast. The programme shall be updated monthly.

**Clause 13: Instructions and Drawings**

*Add the following Clauses after Clause 13.7:*

- 13.8 Tender Drawings shall be used for tender purposes only and shall not be used for construction.

The Engineer shall have full power and authority to supply to the Contractor from time to time during the progress of the Works copies of such further drawings and such instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works, which the Contractor shall carry out and be bound by.

**Clause 35.1: Insurances**

**Clause 35.1.1.2.2**

The value of the materials supplied by the Employer to be included in the insurance sum is R0.00 -Nil.

**Clause 35.1.1.2.3**

The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is R0.00 -Nil.

**Clause 35.1.3**

The limit of indemnity for liability insurance is R10 000 000.00 for any single claim – the number of claims to be unlimited during the construction.

**Clause 35.1.4: Additional Insurance**

Additional Insurance is required for the following:

- a) Insurance of Construction Plant and Equipment (including tools, offices and other temporary structures and contents) and all other items (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
- b) Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.
- c) Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability Indemnity.



- d) Where the contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.
- e) The insurance policy held by the Contractor shall cover "wet risks" because a portion of the works will be in the confines of an existing river and storm water channel.
- f) Professional Indemnity Insurance providing cover in an amount of not less than R10 000 000.00 in respect of each and every claim. This insurance shall remain in force after completion of this contract for a period of not less than 1 (one) year.

**Clause 35.6: Proof of Payment**

*Add the following:*

The contractor shall within 14 days of the Commencement Date provide the Employer/Engineer the relevant policy or policies of insurance.

**Clause 38: Non-Working Times**

The special non-working days are, the days falling in the year-end break and all gazetted public holidays falling outside the year-end break.

The year-end break commences on 15 December 2014 and ends on 5 January 2015.

**Clause 42.1: Time for Practical Completion**

The Works shall be completed within the time frame stipulated or tendered (as applicable) on the Summary of the Bill of Quantities, exclusive of the special non-working days and the year-end break and inclusive of the 14 day period referred to in Clause above.

**Clause 42.3.2: Extension of Time**

Regardless of the cause of any delay an extension of time will only be considered if it can be shown that the activity delayed is on the critical path indicated on the Programme of Works (Clause 12.2).

No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal Climatic Conditions shall be deemed to include normal rainfall and associated wet conditions and materials, strong winds and extremes of temperature. However, in the event that delays to critical activities exceed the number of working days listed below for each month, then abnormal climatic conditions shall be deemed to exist, and an extension of time shall be granted in accordance with the provisions of that Clause.

The number of days quoted below shall be regarded as a fair estimate of the delays to be anticipated and allowed for under normal climatic conditions where inclement weather prevents or disrupts work on the critical path.

January	5 days	May	2 days	September	1 days
February	4 days	June	1 days	October	2 days
March	3 days	July	1 days	November	2 days
April	2 days	August	1 days	December	3 days

Claims for delays for abnormal climatic conditions shall be accompanied by substantiating facts and evidence, which shall be submitted timeously as each day or half-day delay is experienced. Should an extension of time be granted by the Engineer, such extension of time, will be added to the Time for Completion or set against any over-provision that may have occurred in the abovementioned schedule.

It shall be further noted that where the critical path is not affected, no extension of time for abnormal climatic conditions or for any other reason will be entertained.

Rainfall of 10mm or less per day shall be deemed to be normal climatic conditions.

**Clause 42.4: Adjustment to General Items**

*Add the following to Clause 42.4*

The cost of time related general items will be calculated on the basis of the number of days in Clause 42.1.

**Clause 43.1: Penalty for Delay**

The penalty for failing to complete the Works on time is R 5 000.00 per calendar day.

---

**Clause 46.2: Contract Price Adjustment**

The Contract Price shall be fixed and not subject to contract price adjustment.

**Clause 49.1.5: Interim Payments – Materials on Site**

The percentage advance on materials on site but not yet built into the Permanent Works is 80% (eighty percent).

**Clause 49.3: Retention Money**

The percentage retention on the amounts due to the Contractor is 10% (ten percent). The limit of retention is 5% of the Contract Price, including allowances for contingencies and Contract Price Adjustment.

**Clause 49.7: Set-Off and Delayed Payments**

A guarantee in lieu of retention is not permitted.

**Clause 55.1: Termination by the Employer**

*Add the following Clauses after Clause 55.1.9:*

- 55.1.10 The Contractor fails to provide the required Guarantee and insurances within the prescribed time.
- 55.1.11 The Contractor committed a corrupt or fraudulent act during the procurement process or the execution of the contract.
- 55.1.12 an official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited the Contractor.

**Clause 58.3: Dispute Resolution**

Dispute resolution shall be by ad-hoc adjudication.

**ADDITIONAL CONDITIONS OF CONTRACT**

*The additional Conditions of Contract are:*

**Clause 59: Contractor to Provide Everything Necessary**

The Contractor is to provide all labour, material, workmanship, machinery and everything which is or may be necessary in and for the execution and entire completion of the Contract in accordance with the Conditions of Contract, Drawings and Scope of Work.

**Clause 60: Details to be Confidential**

The Contractor shall treat the details of the Works comprised in this Contract as private and confidential (save in so far as may be necessary for the purposes hereof) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper elsewhere without prior written consent of the Engineer.

## Part 2: Data Provided by the Contractor

### Clause 1.2.2: Delivery of Notices

The name of the Contractor is .....

The address of the Contractor is .....

Physical Address

Postal Address

.....

.....

.....

.....

.....

.....

.....

.....

Telephone:.....

Fax:.....

Email: .....

**SIGNED ON BEHALF OF/BY THE TENDERER:**

--

**NAME**

--

**SIGNATURE**

--

**CAPACITY**

--

**DATE**

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

## PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

### C1.3. Performance Guarantee

#### GUARANTOR DETAILS AND DEFINITIONS

“Guarantor means: .....

Physical address: .....

“Employer” means: KGETLENGRIVIER Local Municipality

“Contractor” means:” .....

“Engineer” means: Motla Consulting Engineers (Pty) Ltd

“Works” means: .....

“Site” means: .....

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

“Contract Sum” means: The accepted amount inclusive of tax of R .....

Amount in words: .....

“Guaranteed Sum” means: The maximum aggregate amount of R .....

Amount in words: .....

“Expiry Date” means: .....

#### CONTRACT DETAILS

Engineer issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Works as defined in the Contract.

#### PERFORMANCE GUARANTEE

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

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

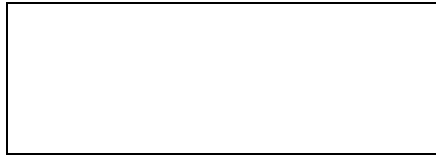
**SIGNED AT:**.....

**GUARANTOR (1)**

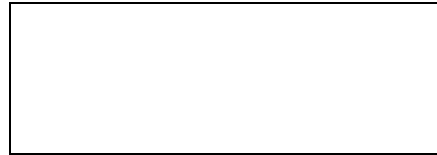
**SIGNATURE**

**DATE**

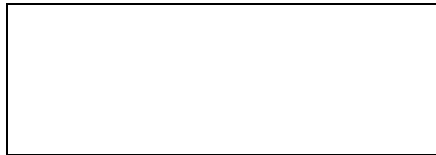
**CAPACITY**



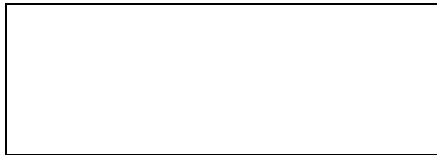
**GUARANTOR (2)**



**SIGNATURE**



**DATE**



**CAPACITY**



**WITNESS (1)**



**SIGNATURE**



**WITNESS (2)**



**SIGNATURE**

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

## PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

### C1.4. Cost Price Adjustment (Not applicable to this tender)

#### C1.4.1 General

Cost Price Adjustment shall be in accordance with the terms of Clause 46.2 of the General Conditions of Contract.

#### C1.4.2 Fluctuation in Cost of Labour and Material

Fluctuation in cost of all labour and material shall be calculated in accordance with the following formula:

$$P1 = Pe [(L*(LEI-LSI))/LSI + (M*(MEI-(MSI))/MSI]$$

Where:

PE = the adjustment period of the contract =  $(1-e-x)$  P

e = The portion of the total Contract sum which relates to the principal components of the Installation for which the Manufacturer's price qualification forms part of the Tenderer's tender price or which are subject to ruling rates of exchange.

This "equipment adjustment" of the Contract sum will only be considered on the strength of acceptable documentary proof. The percentage value of e for the Contract shall be determined by the Tenderer before tender closing date and shall be stated by the Tenderer.

x = 0.10 (unadjusted portion of contract)

L = 0.20 (labour portion of contract)

M = 0.80 (material portion of contract)

LSI = SEIFSA index of actual labour cost (all hourly paid employees) as ruling at date of Tender.

MSI = SADS index for electrical engineering materials as ruling of date of Tender.

LEI = SEIFSA index of actual labour cost (all hourly paid employees) as ruling for month during which work was performed.

MEI = SADS index for electrical engineering materials ruling for month prior to month during which work was performed.

P = Contract Sum – less primary and general

P1 = Price Adjustment

If the Tenderer wishes to base his tender on values of X, L and M different to those specified above, he shall state the relevant figures below:

x =

L =

M =

The effect of the figures so tendered shall be calculated on the basis of the tender amount and shall be considered when appointing a Contractor.

**Value of e**

The percentage content of the Contract value which relates to the principle components of the Works for which the manufacture's price qualification forms part of the tender is:

.....%

**SIGNED BY/ON BEHALF OF TENDERER:**

--

**NAME**

--

**SIGNATURE**

--

**DATE**



**KGETLENGRIVIER LOCAL MUNICIPALITY  
CONTRACT.....**

**PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF  
HIGH MAST LIGHTS IN RATSEGAE**

**C1.5. Adjudication**

Adjudication shall be carried out in terms of Clause 58.3 of the General Conditions of Contract.

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

## C1.1. Occupational Health and Safety Agreement

### AGREEMENT MADE AND ENTERED INTO BETWEEN KGETLENGRIVIER LOCAL MUNICIPALITY (HEREINAFTER CALLED THE "EMPLOYER") AND

.....  
(Contractor/Mandatory/Company/CC Name)

### IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, ACT No. 85 OF 1993 AS AMENDED.

I, .....

Representing

....., as an employer in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be performed, and all equipment, machinery or plant used in such a manner as to comply with the provisions of the Occupational Health and Safety Act (OHSA) and the Regulations promulgated thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration and assessment monies due to the Compensation Commissioner have been fully paid or that I/We are insured with an approved licensed compensation insurer.

COID ACT Registration Number: .....

OR Compensation Insurer: ..... Policy No.: .....

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and Regulations as well as the Council's Special Conditions of Contract, Way Leave, Lock-Out and Work Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an Occupational Health and Safety Agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the appended Occupational Health and Safety Conditions and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan.

Signed at ..... on the ..... day of ..... 20.....

### SIGNED BY/ON BEHALF OF CONTRACTOR - MANDATORY

NAME

SIGNATURE

DATE

### SIGNED BY WITNESS:

NAME

SIGNATURE

DATE

Signed at ..... on the ..... day of ..... 20.....

**SIGNED BY/ON BEHALF OF CLEINT**

**NAME**

**SIGNATURE**

**DATE**

**SIGNED BY WITNESS:**

**NAME**

**SIGNATURE**

**DATE**

**Occupational Health and Safety Conditions**

1. The Chief Executive Officer of the Contractor shall assume the responsibility in terms of Section 16(1) of the Occupational Health and Safety Act (as amended). Should the Contractor assign any duty in terms of Section 16(2), a copy of such assignment shall immediately be provided to the representative of the Employer as defined in the Contract.
2. All work performed on the Employer's premises shall be performed under the supervision of the construction supervisor who understand the hazards associated with any work that the Contractor performs on the site in terms of Construction Regulations 2003.
3. The Contractor shall appoint a Competent Person who shall be trained on any occupational health and safety aspect pertaining to them or to the work that is to be performed.
4. The Contractor shall ensure that he familiarises himself with the requirements of the Occupational Health and Safety Act and that he/she, his/her employees, and any sub-contractors, comply with them.
5. Discipline in the interests of occupational health and safety shall be strictly enforced.
6. Personal protective equipment shall be issued by the Contractor as required and shall be worn at all times where necessary.
7. Written safe work procedures and appropriate precautionary measures shall be available and enforced, and all employees shall be made conversant with the contents of these practices.
8. No substandard equipment/machinery/articles or substances shall be used on the site.
9. All incidents referred to in terms of Section 24 of the Occupational Health and Safety Act shall be reported by the Contractor to the Department of Labour and the Employer.
10. The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of Section 32 of the Occupational Health and Safety Act and into any incident involving a Contractor and/or his/her employees and/or his/her sub-contractor/s.
11. No use shall be made of any of the Employer's machinery/plant/equipment/substance/personal protective equipment or any other article without prior arrangement and written approval.
12. No alcohol or any other intoxicating substance shall be allowed on the site. Any person suspected of being under the influence of alcohol or any other intoxicating substance shall not be permitted access to, or allowed to remain on the site.
13. Prior to commencement of any work, verified copies of all documents mentioned in the agreement, must be presented to the Employer.

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## Part C2: Pricing Data and Bill of Quantities

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	<u>Page</u>
C2.1 Pricing Instructions	81
C2.2 Bill Of Quantities	81

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

## C2.1. Pricing Instructions

1. Measurement and payment shall be in accordance with the relevant provisions of Clause 8 of each of the SANS 1200 Specifications for Civil Engineering Construction referred to in the Scope of Work. The Preliminary and General items shall be measures in accordance with the provisions of SANS 1200-A, General.
2. The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

Unit	=	the unit of measurement for each item of work as defined in the Scope of Works and Specifications
Quantity	=	the number of units of work for each item
Rate	=	the payment per unit of measurement at which the Tenderer tenders to do the work
Amount	=	the unit of measurement for each item of work
Sum	=	the unit of measurement for each item of work
3. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
4. Rates and prices must be stated in Rand figures and not in words. Where a payment item is included in another item, a rate of R 0.00 for this item must be stated.
5. The rates provided will be fixed for the duration of the contract.
6. Except for sum amounts the quantities set out in the Bill of Quantities are approximately and do not necessarily represent the actual amount of work to be done. The quantities of work actual accepted and certified, and not the quantities in the Bill of Quantities, shall be used for determining payments to the contractor.
7. Errors of extension and addition will be corrected as per the Conditions of Tender.
8. Payment based on the rates tendered in this the Bill of Quantities shall cover all the services and incidentals included in the works covered by the contract and shall be made in accordance with the General Conditions of Contract, specifications and agreement pertaining to this contract.
9. The contract price for the completed contract shall be computed from the actual quantities of authorized work done to the satisfaction of the employer, valued at rates tendered against the respective items in the Bill of Quantities and shall include such authorized Provisional Sums and items of extra work as have become payable in terms of the contract documents.
10. Where the contractor is required to furnish detailed drawings and designs or other information in terms of the contract documents, all cost thereof shall be deemed to have been provided for and included in the unit rates and sum amounts tendered for the items.
11. The tenderer must price each item in the Bill of Quantities in BLACK INK.
12. Total Bid Price (Including VAT) to be carried forward to front cover of this Bid Document

## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

## C2.2. Bill of Quantities

CONTENTS	PAGE
BILL OF QUANTITIES – SUPPLY, INSTALLATION AND COMMISSIONING OF HIGH MAST LIGHTING IN MAZISTA AND REAGILE EXTENSION 8	
BILL 1 PRELIMINARY AND GENERAL COSTS .....	81.1
BILL 2 AREA (HIGH MAST) LIGHTING .....	81.2
BILL 3 LV CABLE INSTALLATION FOR HIGH MAST LIGHTS .....	81.3
BILL 4 HEALTH AND SAFETY .....	81.4
BILL 5 PROVISIONAL AND ADDITIONAL AMOUNTS .....	81.5
BILL 5 SUMMARY OF BILLS OF QUANTITIES .....	82

## Summary of Bill of Quantities

**TIME FOR COMPLETION OF CONTRACT:  
AS STATED IN THE FORM OF OFFER (PAGE 61).**

SUMMARY OF BILLS: KGETLENGRIVIER HML		
BILL	DESCRIPTION	TENDER AMOUNT
1	BILL 1 - PRELIMINARY AND GENERAL COSTS	R -
2	BILL 2 - AREA (HIGH MAST) LIGHTING	R -
3	BILL 3 - LV CABLE INSTALLATION FOR HIGH MAST LIGHTS	R -
4	BILL 4 - HEALTH AND SAFETY	R -
5	BILL 5 - PROVISIONAL AND ADDITIONAL AMOUNTS	R -
6	SUBTOTAL A	R -
7	PLUS: CONTINGENCIES 10%	R -
8	SUBTOTAL B	R -
9	PLUS VAT (14%)	R -
10	TOTAL MAIN TENDER PRICE FOR MAZISTA	R -

SIGNED BY/ON BEHALF OF TENDERER

NAME

SIGNATURE

DATE

COMPANY STAMP

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## Part C3: Scope of Work

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### INDEX

	Description	Page Number
C3.1	Scope of Work	84
C3.2	General Specification	89
C3.3	Project Specification	118
C3.4	Management	128



## KGETLENGRIVIER LOCAL MUNICIPALITY

### CONTRACT.....

### PLANNING, DESIGN, AND CONSTRUCTION MONITORING OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE

#### C3.1 Scope of Work

1.1 The areas that form part of this project include the following:

- Mazista – 4 high mast lights – situated 16km from Koster on the road to Swartruggens – 500 stands;
- Reagile Ext 8 – 8 high mast lights – township of Koster – 1 670 stands.

1.2 The Works covered by this contract comprises the complete High Mast Installation in working order as per this specification. It includes the supply, installation and commissioning of all materials, equipment and provisional cost amounts as follows and as per the Bill of Quantities, Section 2:-

- The High Mast Lighting Systems will be electrified from the Eskom Low Voltage Distribution Systems. (Supply Authority) The point of supply will be at the active energy metering point.
- As from the point of supply a Low Voltage Distribution System shall be installed to the High Mast Lighting Installation (The Electrical supply cable).
- Hot dipped Galvanized 30m High Mast Structures. Luminaires Mounting Ring -, Centre raising and lowering type.
- Each Mast Structure shall be fitted with 9 x 400W HPS luminaires.
- Excavation for and casting of concrete mast bases according to structural designs.
- The supply of a winch.
- Earthing and any other relevant lightning protection of the systems.
- The term supply means the manufacture, transportation to site, delivery, off-loading and the storing of all the material necessary to complete the project.
- The term installation means the installation, commissioning, testing and handing over of the completed project.
- Provision of record drawings, operating and Maintenance Manuals
- Provision of Certificates of Compliance.
- 12 months guarantee of the new installation with free maintenance during the defects liability period.
- The work to be carried out on the project comprises of the supply, installation, commissioning and testing of the works as set out.
- All other materials, equipment, labour and services necessary for the complete, safe and efficient operation of the Works, in full accordance with the specifications as laid down in this document and the Occupational Health and Safety Act.
- The project will be taken over by the relevant Municipality and all the works shall be strictly executed in accordance with the SANS standards.

## **2 Drawings**

### **2.1 Employer's Design**

The permanent works included in this contract has been designed by the Employer. The detail of the works is indicated on the drawings and in the specifications. The Tenderer may submit alternative offers for designs prepared by him subject to the conditions specified in the Contract Data.

### **2.2 Drawings**

Drawings are bound into this document.

The Contractor shall be entitled to receive free of charge, two full size A3 copies of each such drawings and to receive, at the cost of reproduction, such additional copies as he shall reasonably require.

One copy of all drawings shall be kept on the Site and be available for perusal by the Client or any person authorized by him.

The Contractor shall, in accordance with the Engineer's instructions, maintain a register on the Site of all drawings and revisions thereof in the chronological order in which they are delivered to him.

## **3. Procurement**

### **3.1 Preferential procurement procedures**

The works shall be executed in accordance with the conditions pertaining to preferences granted in accordance with the preferencing schedule.

### **3.2 Labour and Personnel**

#### **3.2.1 Contractors Personnel**

The Contractor shall limit the utilisation of his permanently employed personnel to that of key personnel only on the Works, as defined below, and shall execute and complete the Works utilising a temporary workforce employed directly by the Contractor and/or by his sub-contractors, using the assistance of the Labour Desk(s), from the various communities that are established in proximity to the Works or which will be consumers from the Scheme.

Without derogating from the Contractor's obligations to complete the Works within the specified time for completion, the numbers in each category of the Contractor's key personnel, as stated by the Contractor in the Returnable Schedules, will be strictly controlled during the contract period and any increase in numbers will be subject to the prior approval of the Employer.

Key personnel means all contracts managers, site agents, site clerks, materials and survey technicians, quantity surveyors, trainers, supervisors, foremen, skilled plant operators, brick layers, welders, shutter hands and the like, and all other personnel in the permanent employ of the Contractor or his sub-contractors who possess special skills, and/or who play key roles within the Contractor's or his subcontractor's operations.

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

- a) The unavailability from local sources of sufficient numbers of temporary workers and/or sub-contractors to execute the Works, provided always that the Contractor has satisfied the Engineer that he has exercised his best endeavors and taken all reasonable actions to recruit sufficient temporary workers and sub-contractors from local sources.
- b) The unavailability within the temporary worker pool and/or from subcontractor sources available to the Contractor in terms of the Contract, of sufficient skills necessary to execute

the Works or specific portions thereof, in situations where the completion period allowed in the Contract is insufficient to facilitate the creation of the necessary skills through the provision of suitable training as contemplated in the Contract;

- c) Any other circumstances which the Engineer may deem as constituting a warrant.

### 3.2.2 Temporary Workforce

The Contractor shall employ labour from the local communities through the Labour Desk(s). Accordingly, the workforce that is employed on Site shall consist of local residents, except for approved key staff in the permanent employ of the Contractor, to the maximum extent that is compatible with the requirements of clause C3.2.1.

The Labour Desk(s) shall assist in identifying available local labour and, where available, semi-skilled labour as well as local sub-contractors. The Labour Desks shall also assist and advice regarding conditions of employment, disputes and disciplinary procedures. The function of the Labour Desk(s) shall however in no way diminish the responsibilities of the Contractor or sub-contractor.

The Contractor and its sub-contractor shall adhere to the statutory minimum wage rates, they are however at liberty to negotiate additional incentive payments based on performance.

A contract of employment or subcontract should be signed between the Contractor and each of his employees or sub-contractors, as the case may be. Likewise contracts of employment must be entered into between each such sub-contractor, and each of the specific subcontractor's employees. Employment and subcontract agreements shall make clear reference to at least the following conditions:

- The minimum agreed wage rate per hour in respect of labourers;
- The agreed pay rate per unit of production where applicable;
- UIF and WCA payments;
- Minimum working hours per day;
- Start and end times of a daily shift;
- Lunch break times;
- Company Policy regarding :
  - Rain time
  - Sickness and absenteeism
  - Disciplinary matters
  - Grievances
- Method and frequency of payment;
- Work clothes and safety equipment to be issued.

### 3.2.3 Local Content and Labour Intensive Construction

The promotion of the use of local content is required in the execution of this project. This will be achieved by the use of local labour and local sub-contractors in the construction of works equivalent to twenty-five percent (25%) of the total cost of works are to be constructed. The following limits apply:

- Construction by subcontractors shall constitute a maximum of 25% of the total local content works.

- Construction using labour intensive construction methods and employing locally labour must make up 75% the total local content works.

Labour Intensive Construction shall mean the economically efficient employment of as great a portion of labour as is technically feasible to produce a standard of construction as demanded by the Specifications with completion by the Due Completion Date, thus the effective substitution of labour for equipment.

Appropriate portions of the Works included in the Contract shall be executed using labour intensive construction methods. These portions of the Works shall be constructed and supplemented only to the extent necessary and unavoidable by the Contractors key personnel, unless otherwise instructed by the Engineer.

The portions of the Works to be executed using labour intensive construction methods are:

- clearing and grubbing of the Site;
- exposing existing services;
- dismantling and re-erection of fences; and
- cleaning and tidying up of the Site.

In respect of those portions of works which are not listed above, the construction methods adopted and plant utilised shall be at the discretion of the Contractor, provided always that the construction methods adopted and plant utilised by the Contractor are appropriate in respect of the nature of the Works to be executed and the standards to be achieved in terms of the Contract.

#### **3.2.4 Subcontracting**

3.2.4.1 The Contractor shall sub-let to sub-contractors appropriate portions of the works. A sub-contract agreement shall be signed between the contractor and each of its sub-contractors.

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

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

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

- a) non-receipt of valid or acceptable tenders/quotations from local sub-contractors;
- b) serious default or failure of appointed local sub-contractors;

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

Should the Contractor, after suitable due endeavor, be unable to identify sub-contractors for portions of the Works as specified, then the Contractor shall be permitted to undertake the Works in question with his own workforce as provided for above.

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

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

### **3.2.5 Sub-contractor**

To qualify as a sub-contractor the following requirements shall be applicable:

- Registration with the CIDB in the min class of EE registration applicable for a particular amount of work
- Submit an original valid Tax Clearance Certificate (in terms of the Preferential Procurement Regulations, 2011 published in Government Gazette No. 34350 dated 8 June 2011),
- Submit a valid VAT Registration Certificate (if VAT number is not included in tax clearance certificate),
- Submit a valid Workmen's Compensation Certificate, Act 4 of 2002,
- Submit a valid Unemployment Insurance Certificate, Act 4 of 2002,
- Submit a Certificate of Incorporation (if a Company),
- Submit a Founding Statement (if a Closed Corporation),
- Submit a Partnership Agreement (if a Partnership),
- Submit an Identity Document (if a One-man concern),
- Submit a Joint Venture Agreement (if a Joint Venture),
- Submit monthly proof of SARS PAYE in respect of all laborers
- Submit a Curriculum vitae of the person who prepares the Health and Safety Plan,
- Curriculum vitae of the Health and Safety Officer to be appointing in accordance with the Occupational Health and Safety Act (Act 85 of 1993).
- Provide all work clothes, safety equipment and tools required for the execution of the Works
- The minimum amount of liability insurance cover required will be R 1 000 00.00 per event, the number of events being unlimited.
- Payment of all amounts due to the local sub-contractor by the Contractor shall be subject to a the same retention conditions as applicable the Contractor
- The sub-contractor shall deliver to the Contractor a performance guarantee of an insurance company or a bank to be jointly and severally bound with the sub-contractor for an amount equal to the same guarantee conditions as applicable to the Contractor
- Submit payments certificates to the Contractor at a frequency of once a month with payment made by the Contractor within seven days after the Employer paid the Contractor.
- The Contractor and its sub-contractor shall enter into a SAFCEC (or similar) sub-contract agreement.

## C3.2 General Specifications

### C3.2.1 General

This general specification defines the standards of materials and equipment, installation work and ancillary work to be employed in the electrical installation contract or sub-contract. The detailed project specification, Section 4, defines the extent of work required and shall have preference to any other section of this specification.

### C3.2.2 Standard Specifications

All materials and apparatus shall conform to the relevant SABS specifications or British Standard Specifications (if such exist) and interchange ability of similar apparatus is required.

All installation work shall comply with the Code of Practice for the Wiring of Premises, SANS 10142-1, as amended.

### C3.2.3 Contract Materials

All contract materials and equipment shall be new and the best of their kind. They shall be protected from damage before, during and after installation. Any damaged, flawed or defaced materials shall be rejected and replaced.

Where makers or catalogue numbers are specified without alternative, no alternative is acceptable: where alternatives are listed, only the named alternatives are acceptable. The phrase "similar and equal to ..." requires that the equipment offered must be closely similar in physical appearance and at least equal in characteristics and performance to the equipment specified: the offer of equipment inferior in either respect will serve to disqualify a tender. Divergences from specified equipment due to non-availability or the like shall be noted by tenderers in the Schedule of Proposed deviations.

### C3.2.4 Workmanship

All workmanship shall be of the best and shall follow the best modern practice with a good "finish" on all visible parts of the installation. All equipment shall be levelled, aligned and plumbed. All work shall be done by, or under, the direct supervision of a skilled, qualified artisan. Any sub-standard workmanship condemned by the Consulting Engineer shall be dismantled and replaced.

### C3.2.5 Delivery and Completion

All contract materials and equipment shall be ordered timeously and delivered to site at dates suited to the agreed construction programme.

The successful tenderer for the installation will be required to commence work immediately following notification of tender acceptance, and shall thereafter at all times maintain the progress required by the agreed completion programme.

### C3.2.6 Fixings and Supports

Fixings to concrete and brickwork shall be by means of bolts grouted into the structure or by means of expanding bolts. The necessary holes shall be made by means of carbide-tipped "masonry" drills: percussion drilling is unacceptable. Fixings to brickwork shall be into solid brick and not into joints. Plugs or inserts of wood are not acceptable.

Fixings to steelwork shall be by means of bolts and nuts through steelwork or by bolts in tapped holes in the steel. "Caddy" proprietary fixings are acceptable if specifically suited to the duty involved.

Fixing into hollow tiles and the like shall be by means of "Butterfly" or "Toggie" bolts; the holes shall be formed by means of "masonry" drills.

Power-driven "shot" bolts are not acceptable.

### **C3.2.7 Chasing and Cutting**

Whenever possible, arrangements shall be made with the Principal Contractor for building in the conduits, etc., of a flush installation. If this is not possible all chasing and cutting shall be done under this contract.

All chasing and cutting shall be done with properly sharpened tools, with the minimum possible damage to the building: Power-driven cutting tools shall be used wherever possible. No cutting or chasing shall be done without the express permission of the Architect or the Structural Engineer in charge of the project.

The Principal Contractor will make good all plaster and brickwork damaged in the course of normal chasing and cutting. However, any additional plaster work or making good which has to be carried out due to the Electrical Contractor's inefficient or late installation of conduit, switch boxes, plug boxes or other equipment, will be carried out at the Electrical Contractor's expense.

### **C3.2.8 Levelling and Plumbing**

All equipment shall be carefully levelled and plumbed, checked with a spirit level. Should any equipment be unsatisfactorily installed in this respect it shall be dismantled and reinstalled. The costs of making good to damaged structures, plaster and paintwork shall be deducted from the moneys due to the successful tenderer. It must be noted that boxes for imported accessories must be levelled and plumbed when installed, since the inserts cannot be levelled independently of the boxes.

### **C3.2.9 Definition:**

In this Part, the term "Contractor" means the person, firm or company whose tender has been accepted for the work specified in the document of which it forms a part.

### **C3.2.10 Electrical Supply and Phase Rotation**

The electrical power supply details relative to fault levels, voltage and phase rotation are given elsewhere in this Specification.

The phase rotation specified shall be maintained on all overhead lines, cables, transformers, and switchgear and distribution equipment.

Where existing connections are to be reconnected to a new system, the phase rotation is to be checked before disconnection and the reconnection made to maintain the same phase rotation.

### **C3.2.11 Switching Of Power Supplies**

Any switching of existing power supplies shall be pre-arranged with the appropriate Authority. All possible preparation shall be made in advance; to minimize the time required for re-energizing the system. All such switching shall be carried out by the "responsible person" unless such authority is given to the Contractor by that person, in writing.

### C3.2.12 Earthing and Bonding

#### Resistance Values

While every effort should be made to obtain an earth resistance value of 1,0 ohm or less, the maximum values of earth electrode resistance acceptable, unless stated to the contrary elsewhere in this specification, are 10 ohm at any mini-sub or transformer, 15 ohms at any indoor or outdoor switchboard or HV gang links and 20 ohms at cradle earthing points, lightning arresters or other pole mounted equipment. In the case of the earthing of LV feeder and overhead line neutrals the combined resistance to earth of all systems shall not exceed 10 ohms.

Transformer neutral earthing shall comply with the sub-Clause "Transformer Earthing" below.

#### Main Substation Earth System

Where this system is not detailed elsewhere in this Specification, it shall comply with the sub-Clause "Earth Systems" elsewhere herein, two separate systems being installed and linked independently to the earth bar.

The main earth bar shall consist of an adequate length of minimum 50mm x 6,3mm tinned copper bar. It shall be supported by means of cycloaliphatic resin insulators in a suitable position on a wall or plinth and shall be readily accessible for inspection. Conductors connecting equipment to it shall be 70mm<sup>2</sup> copper terminated in compression type lugs.

The size of earth bar and number of earth conductors shall depend upon the prospective short circuit current of the system. All connections shall be suitably labelled.

#### General Earth Systems

Unless otherwise specified elsewhere in this Specification, the earth systems for distribution transformers, mini subs and ground or pole mounted switchgear, lightning arresters, etc. shall generally comprise two earth electrodes with 1,5m long earth spikes located 6,0m apart, linked with 70mm bare conductor. They are to be located adjacent to pole structures or ends of plinths in the case of mini subs and shall be located at least 1,0m there from.

In the case of transformer earthing, if the neutral earth system resistance is not 1,0 ohm or less, two systems as above are to be installed, one for the LV neutral and the other for the tank and associated equipment in which case they are to be kept at least 6,0m apart and at opposite sides of the transformer position.

The earth system is to be connected with 70mm<sup>2</sup> insulated earth conductor to the earth bar or transformer tank earth stud as appropriate.

Immediately after installation and before livening up the equipment the Contractor shall test the earth resistance of the earth system, using the respective earth bar or termination as the reference point. If the required value is not obtained, each earth spike, if installed in a sidewalk, shall be increased in length by driving a further length of 1,5m but where located in open ground, two additional spikes are to be installed. These latter spikes are to be perpendicular to the original two, in line with the spike at the point of connection of the insulated earth conductor and each 6,0m there from.



After installing the additional spikes the earth resistance shall again be determined. The Contractor shall submit a report in duplicate confirming the values measured, including the first set if appropriate, to the Engineer.

Where the number of spikes called for does not achieve the required values, the Engineer is to be advised and will give further instructions for the improvement of the values obtained. Where more spikes are necessary to obtain the required value, these shall not be installed within 6,0m of any other spike.

The common leg of the secondary of CT's, other than the secondary of summation transformers, shall be effectively earthed to the main earth system.

### **Transformer Earthing**

Transformers, pole mounted, ground mounted or in mini-sub, shall be provided with earth systems as described in the sub-Clause "Earth Systems" above. If the earth system resistance is 1,0 ohm the mini-sub neutral and earth bars, or the transformer neutral and the tank earth stud, shall be bonded with an insulated earth conductor.

Where the earth system resistance is in excess of 1,0 ohm, a second separate earth system shall be installed in accordance with the foregoing sub-Clause and the neutral and tank connections shall be taken to each of the independent earth systems with separate insulated earth conductors. In this case a neutral surge arrester, complying with the Sub-Clause "Lightning Arresters" elsewhere in this Part, is to be installed and connected between the transformer neutral and the tank earth point. At mini-sub, where the arrester is NOT to be installed within it, the Engineer is to be consulted. For tendering purposes it shall be assumed that the second earth system and neutral Arrester will not be required unless called for elsewhere in this Specification.

In the case of electrical reticulation contracts the earthing shall also comply with the "AMEU/SAIEE Code of Practice for the use of CNE on Low Voltage Distribution Systems".

### **Reticulation Feeder Neutral Earthing**

At kiosks and fused feeder pillars a 30m length of bare earth conductor of half the size of the phase conductors but not greater than 70mm<sup>2</sup> shall be laid from each kiosk earth bar towards the source of supply. The neutral bar shall be connected to the earth bar with green insulated conductor of the equivalent size.

At various points not exceeding 150m apart along the length of overhead lines and at tee connections and the ends thereof as indicated on the drawings, the neutral conductor shall be bonded to an earthing point which shall comprise a 1,5m long earth spike. The insulated earth conductor shall be carried in a galvanised sleeve from 500mm below ground to 3,0m above. The connection of the earth conductor to the line conductor shall be made with a connector suitable for the particular line conductor material.

### **Earthing of Pole-mounted Equipment**

Pole mounted transformers shall be provided with an earth system as described above. The insulated earth connections shall be taken up the pole in a section of galvanised conduit extending at least 500mm below ground level and to a height of 3,0m above.

At cradle earthing points, reclosers, or sets of lightning arresters, one 1,5m long earth spike shall be provided, the insulated earth connection being enclosed in galvanised conduit as described above.

### **Operator's Platform**

A 1,0m x 1,0m HDG operator's platform complying with the detail shown on the drawing annexed to this Specification is to be installed at each gang-link isolator, unless otherwise indicated in this Specification. The platform is to be erected 150mm above ground level, the legs being cast into mass concrete generally complying with the Clause "Plinths" elsewhere in this Part.

The platform is to be connected "by means of two 40mm" bare earth conductors to an earth system as described above.

A separate 50mm<sup>2</sup> bare earth conductor is to be used to bond the isolator steelwork to the platform. The steelwork ABOVE the insulated section of the operating rod is not to be bonded.

Where a steel plate in lieu of a platform is specified elsewhere in this Specification, this shall comprise a hot dip galvanised steel plate of 1,0m x 1,0m x 6,0mm steel located at the operating handle position. This plate is to be bonded to the earth system and to the isolator steelwork using two 50mm<sup>2</sup> earth conductors connected to separate points.

### **Earth Spikes**

Earth spikes shall comprise 16mm sectional steel cored rods with a minimum of 0,25mm pure copper coating molecularly bonded thereto, complying with SABS 1063, and of "Cadweld" or equivalent manufacture. The top of earth spikes and the interconnecting conductors are to be 1,0m below finished ground level.

Under no circumstances are earth spikes to be located closer than 1,0m to any structure or plinth nor are they to be installed in pole holes.

The connections to earth spikes shall be by means of at least two phosphor bronze mechanical clamps of an approved type for this duty, or a "Cadweld" joint. The clamps shall not be attached to the rod but must be installed so that the bolt face is in contact with the rod. Brazing will not be accepted. The connection must be wrapped with two layers of "Denzo" tape. "

A cable marker as described elsewhere in this Part shall be installed above each spike and shall be labelled "Earth Spike".

### **Earth Continuity Conductors**

Earth conductors shall be hard drawn bare copper wire complying with SABS 182 or bi-colour green/yellow PVC covered, the PVC being UV stabilised complying with SABS 1411 Part 2, as elsewhere specified herein. The conductor sizes shall be such that they can carry the short circuit current likely to be imposed upon them but generally shall be half the area of the phase conductors with a maximum size of 70mm<sup>2</sup> or in accordance with the appropriate Regulations, unless specific sizes are given elsewhere in this Specification. 50mm<sup>2</sup> conductors shall be 7/2,65 HD.

Bare earth continuity conductors shall be run with all cables constituting a low voltage distribution system except in the case of township reticulation where an earth system as described in the sub-Clause "Neutral Earthing" above shall be installed at kiosks, etc.

A single conductor may be used where two or more cables run together, provided that the

conductor cross-sectional area is based on the largest size cable in the run, and that branch earth wires are solidly connected to the main earth conductor using only "Cadweld" connections. Earth continuity conductors shall be connected to main earth bars. Uninsulated earth conductors shall not be less than 500mm below ground level. Above this level all earth conductors shall be green insulated carried in a PVC conduit sleeve except where galvanised conduit is specified elsewhere herein.

A terminal lug shall be crimped onto the end of the main earth conductor for bolting to the main earth bar of a substation or mini-sub or other outdoor equipment. Two mechanical clamps shall be used for connection onto cradles or other equipment, as appropriate.

Earth connections shall be so made that in the event of any connections being removed the earth connection to the rest of the equipment will not be affected.

### **Bonding Generally**

All metallic parts of the installation are to be bonded to the earth system as required by the appropriate Regulations.

All iron roofs, gutters, down pipes water and waste pipes, as well as all steel structures, are to be bonded to earth. The maximum resistance of any such point to the earthed end of the earthing lead shall not exceed 0,2 ohm.

### **Bonding of Equipment**

Where equipment is bolted together, as in the case of an HV or LV switchgear panel, there is to be a 32mm x 4mm copper earth strap extending the whole length of the equipment. All earth bars shall be run in one continuous length as far as possible, and shall not be bent or formed in any way that requires hammering or severe distortion. Any joints shall be lapped with at least two bolts with nuts and washers of suitable size. The lapped ends shall be pre-tinned. If multiple straps are used, they shall be bolted and fixed together at not more than 75mm intervals. All connections shall be made using brass or stainless steel bolts, nuts and washers, together with a star lock washer, on all kiosks, fused feeder panels, mini subs and outdoor equipment. Connections to indoor equipment may be made with cadmium plated steel bolts, nuts and washers, with a steel spring washer.

All steelwork on a pole is to be bonded using 25mm<sup>2</sup> solid copper conductors. This requirement applies to cross-arms, all insulator supports and any other hardware. Where equipment is also mounted on the pole, the bonded metal is to be earthed to an earth spike as elsewhere specified herein, using a 50mm<sup>2</sup> bare copper conductor.

### **Bonding of Steel Lighting Poles**

Steel streetlight and site lighting poles shall be bonded with a continuous earth continuity conductor of half the area of the phase conductor, but a minimum size of

4mm<sup>2</sup>, lay with the cables. This conductor shall be connected to the pole earth stud. At the last pole in a run the neutral conductor shall be bonded to earth.

### **Supplementary Requirements for Building Services**

The main earth system is to comply with the Supply Authority's requirements. Earth spikes, mats and conductors shall be installed as early as possible in the building program, and the onus is on the Contractor to arrange this with the Building Contractors to avoid later disturbance of completed construction. Before proceeding, however, the attention of the Engineer is to be drawn to the exact proposals and approval obtained.

Bare earth conductors complying with the requirements of the Wiring Code shall, unless otherwise specified elsewhere in this Specification, be drawn into conduits together with the current carrying conductors, between all main, sub-main and sub-distribution boards. Ends of earth conductors shall be terminated in lugs securely bolted to switchboard frames or trays.

Unless otherwise specified elsewhere in this Specification, bare copper earth wires complying with the Wiring Code shall be run with all socket outlets, water heater, stove and other power outlets. Bare earth wires shall also be run in all ceiling and skirting trunking to bond all light fittings, socket outlets and the trucking lengths themselves. Such conductors shall also be run in all non-metallic conduits. In aluminium trucking, the earth wire shall be insulated with green PVC.

Earth conductors run outside flexible tubing, where this has been permitted, shall be run neatly along the tubing and shall be held in place by approved cable ties. Such conductors shall not be wound around the tubing.

## **C3.2.13 LV Circuit Breakers**

### **General**

The supply voltage, normal current, fault capacity and type, as well as any special characteristics required of circuit breakers, shall be as stated elsewhere in this Specification.

All main circuit breakers shall be equipped with adjustable instantaneous magnetic and inverse time delay thermal overload releases on each phase and shall be arranged for flush mounting. They shall be connected to the busbars with solid copper connections of adequate section to resist short circuit stresses that may be imposed by faults up to the maximum rupturing capacity of the breaker.

Where circuit breakers are used to control supply taken directly from the Supply Authority, they shall be of a make approved by that Authority, and shall be set to trip within the specified limits laid down by that Authority.

### **Air Circuit Breakers**

Air circuit breakers shall comply with the requirements of BS 4752. Unless elsewhere specified, air circuit breakers of 800A or larger shall be of the rack-out type. Interlocking shall ensure that racking in or out can take place only with the circuit breaker open. The connecting device between the incoming cable and the breaker and between the circuit breaker and the outgoing bars shall be fitted with shutters, which are automatically closed and locked by the action of racking out.

### **Moulded Case Circuit Breakers**

Moulded case circuit breakers shall comply with SABS 156 with time delay tripping on low overloads and high speed tripping on short circuit. Except where larger rupturing capacity MCB's are elsewhere specified, these shall be Class 5kA 240V or 415V, as applicable, and where various current and breaking capacities are required, all MCB's are to be of one size throughout the installation. All MCB's are to carry the SABS Mark to ensure that they comply with Compulsory Specification VC 8036.

The Engineer will not accept a mixture of circuit breakers from various Manufacturers to meet the various duties required.

In the case of motor control, all MCB's shall be supplied with "slow" tripping curve (Curve D or curve 1) except that those MCB's controlling motor starters located in the same control panel shall not have over current trip elements, this feature being provided by the adjacent starter overload device, magnetic high current protection only being required.

Where MCB's are required to be connected to cables larger than 70mm<sup>2</sup>, the terminals shall be of the stub busbar or rear connecting stud types. For all other cables, box type terminals shall be provided. Three phases MCB's shall be fitted with suitable phase barriers.

MCB's shall be fitted with purpose made terminal shrouds where no fascia plate is provided.

#### **C3.2.14 Supply Authority Meters**

Supply Authority meters will be supplied by that Authority and shall be installed in accordance with their requirements for the type of tariff involved. All other meters not specifically detailed as Supply Authorities are to be supplied and installed by, the Contractor.

Where Supply Authority meters are specified as being installed in a metering cubicle, this cubicle shall be supplied and installed by the Contractor and shall form a part of the appropriate board. The cubicle shall be completely separated from the rest of the board and shall have its own door, which shall be sealable. Where the Supply Authority has requirements for standard metering cubicles, these shall be provided.

Eskom Metering units for a Single Phase S1 connection shall be used. The connection Cost will be paid by the contractor

#### **C3.2.15 Trenching, Excavation and Compaction**

##### **General**

The Contractor shall allow for all excavation and back-filling of cable trenches and holes for planting of poles unless this is stated to be done by others elsewhere in this Specification. In this case the Contractor shall provide the trenching contractor with details of his requirements in this regard prior to work being commenced and shall be responsible for ensuring that these requirements are met. He shall also be responsible for ensuring that any trenches opened by him or for him do not constitute a hazard to the public. Where necessary he shall provide barriers and warning lights

at night or any other protection of trenches or excavations as required by the Engineer or any statutory or local Authority requirements.

The Contractor shall be responsible for leaving all areas affected by cable trenches, holes in the ground, and any other work done by him or on his behalf, in a clean and tidy state, and for making good all tarmacadam, concrete, paved or grassed surfaces.

It will be the Contractor's responsibility to make good any subsidence that may occur within six months of back-filling trenches, and, in the case of tarred-surfaces, to remove and re-tar with new material.

### **Routing**

The routes for the underground cables are shown on the drawings. Any proposed variation of these routes by the Contractor, shall be approved by the Engineer or Clerk of Works before trenching is done.

It shall be the Contractor's responsibility to ensure that the routes of the cables are correct. Where the Contractor is in any doubt regarding peg positions, he shall, after having obtained the approval of the Engineer, employ the services of a registered Surveyor to obtain the correct locations. Re-imburement for the cost of such services will, subject to granting of approval, be made from the Provisional Sum included for this purpose.

Any major deviation considered necessary must be approved by the Engineer. The Employer will make no payment for claims for extra work arising out of the cable trenches being in the wrong place. Routes shall run generally in road reserves parallel with and 1,0m from plot boundaries. Where no road exists or is not indicated, the route shall run in open ground adjacent to the plots and 1,0m from the plot boundaries.

### **Pegs**

All erf boundary pegs will have been installed at the time the site is handed over to the Civil Contractor, who will be responsible for the replacement of any pegs disturbed or removed by him.

In the case of this Contract, the Contractor shall request the Engineer's Representative to check all pegs with him prior to commencing work in any particular area so that the number of missing pegs can be recorded. Should any further pegs have to be replaced after the electrical work is completed, this will be for the Contractor's account. Should he fail to verify the missing pegs as aforesaid, he may be held responsible for the replacement of all such missing pegs.

### **Trenching and Excavation by Others**

The Contractor is to co-operate closely with the trenching contractor at all times and is required to be in attendance during backfilling of all trenches, etc., to ensure that cables are not damaged in any way and that poles are correctly aligned.

### **Type of Material**

Unless otherwise specified elsewhere in this Specification or Schedule of Quantities, Tenderers shall allow for excavating cable trenches and holes in earth. In addition, unit rates shall be provided for excavating in soft rock and hard rock.

The following definitions shall apply to the three categories. Where the conditions experienced are a combination of two or more of the conditions listed below, the Contractor shall be paid on rates in proportion to the contents of earth, soft rock or hard rock experienced in the excavations.

"Earth" shall mean ground that can be removed by hand and includes loose gravel, clay, made-up ground, loose or soft shale, loose oukclip, and boulders less than 75mm in diameter.

"Soft rock" shall mean all hard ground such as oukclip, hard shale, decomposed rock, loose boulders and large stones, etc., which require the use of pneumatic tools, mechanical rippers and/or excessive hard labour to excavate and remove economically.

"Hard rock" shall mean granite, quartzite, dolomite, or other rock of similar hardness, which can only be excavated and removed economically by blasting, wedging or breaking.

### **Verification of Excavation Claims**

Notwithstanding any Provisional Amounts for excavation in rock included in the Schedule of Quantities, payment will only be authorised for excavation in ground other than earth upon submission of documentary proof of such excavation made and signed as correct at the time trenches or holes were excavated.

It is essential that, in all cases where rock has to be excavated, or where poles, etc., have to be stabilized with concrete or by other means, in loose sand or in soft or waterlogged ground or where substitution of the excavated material is necessary for backfilling, that the Engineer or Clerk of Works be notified before such excavation work is back-filled. This is for the purpose of having the soil conditions encountered noted and confirmed in writing.

The amounts and type of rock encountered shall be measured by the Contractor in the presence of the Engineer or Clerk of Works. This information, together with the date and locality, shall be entered by the Contractor in a suitable triplicate book furnished by him. These entries shall be signed by the above parties. The original sheet shall be submitted to the Engineer and the duplicate copy shall be attached, by the Contractor, to his monthly invoice.

### **Precaution with regard to other Services**

The Contractor shall exercise extreme caution in his work to avoid damage to existing underground services. Certain services may be indicated on the drawings but it is not to be assumed that these are the only services or that their indicated position is entirely accurate. Such information is given as a guide only and does not negate the above responsibility. All excavation in the vicinity of other services must be undertaken by hand.

## Compaction

Particular care shall be taken in compacting pole holes, trenches crossing roads and those crossing or running under or within 1,0m of paved or tarred sidewalks. In trenches, the backfill shall be replaced in 150mm layers and four to six passes with a vibrating pan compactor shall be made per layer. Around poles, a jumping jack shall be used on each 150mm layer. When clay is encountered, the Engineer should be advised and may instruct the Contractor to remove all such excavated material and replace it with more suitable material, which shall then be compacted as above. Where material is too wet for proper compaction, it should be dried out and if too dry, shall be dampened. When rain is likely to occur, all excavated material shall be suitably protected to prevent the necessity for later drying out.

In the case of road crossings, the excavated base and sub-base material shall be mixed and replaced up to the top level of the original sub-base. New material equal in composition to the original base course shall be supplied, this material being used for the full depth of the base course layer.

The degree of compaction required shall be field densities of 95% in respect of poles and road crossings and 90% in respect of sidewalks, of the Modified AASHO density, as measured by the Sand Replacement Method described in the "Standard Method of Testing Materials" issued by the Division of National Roads, Department of Transport, Private Bag 193, Pretoria. The Engineer will, if the compaction is in doubt, arrange to have it independently tested and should the compaction prove to be below standard, the cost of the test will be debited to the Contractor, who will be required, at his own expense, to open and re-fill the trench or pole hole to obtain the specified compaction value.

In all other areas, backfill shall be replaced in 150mm layers and shall be hand tamped, the remaining material being heaped over the trench for later settlement.

### C3.2.16 Public Lighting

#### General

Site lighting poles and luminaries to be installed under this Contract, including the type, mounting height, outreach dimensions, quantities, etc., are detailed elsewhere in this Specification. All poles offered shall conform in all respects to the requirements of the Occupational Health and Safety Act where applicable and to SANS 10225, Code of Practice for the Design and Construction of Lighting Masts. In particular they shall comply with the requirements regarding design wind loadings and factors of safety.

Poles shall have neat flush access openings with the bottom of the opening 350mm above ground level. The opening shall have rounded corners and shall be adequately sized to facilitate installation of the specified electrical equipment.

The minimum size shall be 140mm x 355mm unless otherwise specified.

The opening shall be provided with a neat flush weatherproof door fitted with a tamper proof locking device designed to secure the door firmly in position and prevent unauthorized access into the base compartment.



A minimum of four access door keys shall be supplied to the Employer on completion of the installation. A receipt shall be obtained from the Employer for these keys and a copy of this receipt shall be submitted to the Engineer with the final progress claim.

Earthing design specified elsewhere.

Spigots shall be provided to suit the luminaires specified elsewhere in this Specification. Particular care shall be taken to establish the exact diameter and length of the spigot or spigots required such that the luminaire fits neatly up against the shoulder formed between the pole and the spigot. Care shall be taken to avoid damage to the spigots during transport, storage and erection.

### **Erection of Poles**

Poles shall be planted in the positions indicated on the drawings. They shall be planted absolutely plumb with the outreach at right angles to the carriageway edge, where applicable.

Should any pole position coincide with trees, building canopies, driveway entrances, overhead conductors or other obstacles, an alternative position is to be confirmed with the Engineer before excavation of the pole hole.

Where poles line a road they shall be carefully aligned with each other to form straight lines or smooth curves generally following the alignment of the associated roads. The planting depth shall be carefully controlled to ensure that all luminaire will be at the same height above the level of the carriageway.

Care shall be taken when backfilling around the pole to ensure that compaction is even all around the pole and is to the requirements specified in the sub-Clause "Compaction" elsewhere in this Part. Where poles are to be planted in fill material, on ramps, etc., one pocket of dry cement shall be mixed with the backfill material before commencing backfilling and compaction. Subject to the prior approval of the Engineer, this technique shall also be applied wherever it is considered necessary to stabilize the pole due to unsuitable soils, etc. Where the Contractor feels that this situation exists, he must advise the Engineer immediately and obtain a decision.

### **Luminaires**

The types and wastage of the luminaires required are detailed elsewhere in this Specification. The lighting design has been based on the photometric performance of the specified luminaires and the tender price must be based on the supply of these luminaires.

Alternative offers based on the use of luminaires other than those specified may be submitted in accordance with the requirements of the Clause "Alternative Offers" in Section A of this Part. Such offers must, however, be accompanied by a complete set of photometric data on the luminaires offered, comprehensive details of the construction of the luminaires and a complete set of design calculations based on the requirements of SANS 1098.

Unless otherwise stated, the luminaires are to be provided with tapped ballasts and power factor correction capacitors. It will be stated elsewhere in this Specification whether control gear is to be integral with the luminaires or remote mounted in the pole base compartment.

Where control gear is to be mounted in the pole base compartment, it shall be the Contractor's responsibility to ensure that the dimensions of the base compartment and access opening are adequate, notwithstanding the minimum dimensions specified herein.

### **Electrical Connections**

No cable glands or gland plates are required for the termination of PVCAS cables in site lighting poles. The cable shall be brought up to a convenient position adjacent to the lower section of the access opening. The outer PVC sheath shall be stripped back and the steel wire armouring pulled away from around the cables, twisted into compact tails and bonded together by means of an adequately sized line tap.

A separate earth conductor shall be taken from this line tap to the earth stud in the pole base compartment. Phase and neutral conductors shall be jointed using shrouded line taps and the cables neatly secured to the bottom of the hardwood-fixing block by means of saddles.

Unless otherwise specified elsewhere in this Specification, the phase conductor to the luminaire control gear shall be protected by a CBI type "STI", 20A streetlight MCB attached to the hardwood block.

Where luminaire control gear is to be mounted in the pole base compartment, it shall be firmly secured to the hardwood block above the MCB. The earth stud on the control gear housing shall be connected to the earth stud in the pole base compartment.

Phase and neutral conductors between the pole base and luminaries shall be 1,5mm<sup>2</sup> PVC insulated for luminaries up to 400W and 2,5mm<sup>2</sup> PVC insulated above this rating.

The phase to which each luminaire is to be connected may be indicated on the drawings. It is essential that this arrangement is strictly adhered to.

### **Photo-electric Controls**

Where called for elsewhere in this Specification, a photo-electric control unit shall be used to switch the site lighting installation. Photo-electric switches shall be of the type comprising a photo-sensitive resistor, thermal actuator with an inherent operating delay to make it insensitive to short duration changes in light levels and a change-over switch mechanism, all housed within a tough, translucent, weather and ultra-violet resistant cover. The operating level shall be factory preset to switch on at approximately 50 lux and off at approximately 100 lux. The response time after sudden changes in light level shall be not less than 15 seconds.

Integral protection against voltage surges shall be provided.

A suitable unit would be the "National" type ZS-20AR.

Where the photo-electric switch is pole mounted it shall be positioned in such a way that it will not be affected by spill-light from the site lighting installation or by vehicle headlamps, but where possible it should be mounted on a substation or at the rear of a mini-sub.

### **Completion and Testing**

Immediately after completion of the installation, the site lighting system shall be switched on and lamps allowed stabilising for at least one hour. Any faulty lamps shall be replaced.

The voltage at each luminaire shall be measured and toppings on the ballasts set accordingly.

### **Guarantees and Maintenance**

The installation shall be guaranteed and maintenance carried out in accordance with the requirements detailed elsewhere in this Specification except that, where no other defects or maintenance procedures requiring the Contractor's attention exist, the installation of replacement lamps supplied by the Contractor will be carried out by the Employer's maintenance personnel, unless otherwise specified elsewhere herein. Under no circumstances is any spare equipment or lamps elsewhere specified to be used for replacement during the foregoing period.

## **C3.2.17 Light Fittings**

### **General**

Allowance shall be made for the supply and installation of light fittings as specified elsewhere in this Specification with the exception of those fittings for which PC Sums are allowed. Allowance for the installation only of these PC fittings shall be made.

Each incandescent fitting shall be supplied with a gas filled pearl or opal lamp of the wattage specified on the drawings complying with SABS 56 and Compulsory Specification VC 8043. Allowance shall also be made for appropriate lamps for mercury or sodium fittings. The size of each fitting must suit the wattage of the lamp specified. In the case of PC fittings, these will be supplied with lamps.

Fittings to be installed at each point are detailed on the drawings according to the code types set out elsewhere in this Specification. Supply of fittings marked PC is covered by a PC amount in the Price Summary. Catalogue numbers refer to fitting type only, not necessarily to size, which is to suit the wattage shown.

Fittings shall be directly fixed to ceiling or structure in addition to being fixed to the conduit box.

### **Incandescent Fittings**

Glass used on bowl fittings, etc., shall be of the best quality free from flaws and seams, and where possible, shall screw to galleries. Incandescent fittings shall be adequately ventilated for dissipation of heat produced by lamps.

Lamp holders shall be of brass to SANS 1165. Porcelain holders may be offered for approval. Bayonet cap holders shall be used for lamps up to and including 150W. Above this rating Edison or Goliath Edison screw type holders, as may be appropriate to the lamp wattage, shall be used. Where small holders are required these shall be SBC not SES. The outer terminal of all screw type holders shall be connected to the neutral wire.

In all incandescent lighting fittings where the fitting is mounted directly on to the conduit box and no provision is made for adequate ventilation of the lamp holder, and also all ceiling fittings where the rating is 200W or more, silicon or similar heat resisting insulated wiring shall be used from the lamp holder to a PVC taped porcelain terminal block inside the conduit box.

For all pendant incandescent light fittings supplied without metal suspension rods or chains, either best quality PVC insulated and white PVC served flex or PVC insulated steel wire cored white PVC served flex shall be used. In either case the weight of the fitting shall be effectively removed from the conductors using suitable clamping devices. Connection shall be made to a terminal block as above. White plastic ceiling cups shall be provided and, unless otherwise specified, cords shall be 1,0m long.

### **Fluorescent Fittings**

Fluorescent fittings and their components shall comply with all the SANS Specifications relating to them.

Bodies are to be constructed of cold rolled sheet steel, bonderized or similarly treated for the inhibition of rust, treated with anti-corrosion undercoats of paint followed by high quality white baked enamel. No patched up scores or other damage to enameling will be accepted. Nuts, screws, washers, etc., are to be non-ferrous or plated to prevent rusting. No equipment is to be riveted to the bodywork, all equipment being easily removable.

The back plate is to be free of all protruding screw heads. All such screws are to be countersunk headed.

Recessed fittings shall be provided with a raceway cover over control gear, thus preventing control gear from accidentally falling onto the diffuser. Capacitors used in such fittings shall be so manufactured that in the event of failure, they do not present a fire hazard.

Fluorescent fittings are to be removable and not held in position by bolts shot through the back plate. If this system is used, the fittings will have to be removed and remounted at the Contractor's expense.

The fittings are to be wired throughout and wiring brought to terminal strips or connectors close to the conduit entry. Each of the incoming terminals shall be large enough to accommodate two 1,5mm<sup>2</sup> wires without difficulty.

Lamp holders are to be mounted on rigid material and so spaced apart that any natural expansion of the lamp will not exert horizontal forces on the holder. Each fitting is to be supplied with 3500°K white tubes, unless otherwise specified.

Low loss, high power factor ballasts approved by SABS tested in accordance with Section 7 of SABS 890, or ballasts which at least provide the minimum values laid down by the SABS shall be employed. Ballasts shall be of best quality self-contained metal clad type, suitable for operation on 220/250V 50Hz supplies. The voltage rating at each tap of the ballast terminal block shall be clearly and indelibly marked. Ballasts are to be silent in operation and shall be power factor corrected to not less than 0,9 lagging. Multi lamp fittings shall be stroboscopically corrected. Operation shall not cause radio or television interference.

Where ballasts bearing the SABS Mark of approval are available for a particular type of lamp and associated circuit, ballasts of that category, which do not bear the Mark, will not be accepted.

### C3.2.18 Sleeves

Sleeves for cables shall be either PVC with single socket joints complying with SANS 1791 (heavy duty) or fibre cement complying with SANS 1223 in the case of 50mm and 100mm sleeves (in compliance with SANS 10198 : Part VIII) or with SANS 1819 for larger sleeves, the sizes being as indicated on the drawings.

Sleeves shall be nominal 100mm diameter unless otherwise specified. Pitch fibre sleeves shall NOT be used.

The sleeves shall extend at least 1,0m beyond each side of a road crossing and shall be effectively sealed at the ends. Each sleeve shall be provided with a draw-wire. At least one spare sleeve shall be provided at each crossing.

All sleeves shall be laid in accordance with SANS 1200 (LC) and at a depth of 900mm unless otherwise indicated. The radius of the bends used in the sleeves shall not be less than six times the diameter of the sleeve, and the sleeve not is less than twice the cable diameter unless otherwise specified.

Sleeves shall be laid on a 100mm compacted layer of selected bedding material or, if this is not available, on a 100mm sand bedding. The cover layer shall be hand compacted completely around the sleeves and to a cover of 150mm above the top of them. The sleeves shall be supported along their entire length by the bedding. A further 100mm layer of selected bedding material shall be added and this shall be compacted using four to six passes of a vibration pan compactor. Thereafter, the trench shall be back-filled and compacted as specified in the sub-Clause "Compaction" elsewhere in this Part.

Both ends of all sleeved crossings shall be marked by means of cable markers as elsewhere specified, labelled "cable sleeve".

The Contractor shall make all necessary arrangements with the appropriate Authorities for closing sidewalks and/or half the roadway at a time, and he shall comply fully with any statutory requirement applicable and any requirements the Authorities deem necessary. The surfaces shall be made good to the satisfaction of the authorities and the Engineer, but where tarring or paving is to be laid or re-laid, this shall not be done until the Engineer has given the necessary approval.

Where the HV or main LV cables cross over or pass under other services such as water or drain pipes, they shall be run in sleeves. Where these crossings present a particular hazard to the cable, the Contractor shall draw the attention of the Engineer to any such crossing requiring special attention.

All sleeves for Telkom cables will be 110mm diameter pitch fibre similar to Santar, supplied by the Regional Engineer, unless otherwise specified. These sleeves are to be laid under this Contract and must be kept at a minimum of 0,6m horizontally from and 0,3m vertically above any power cable sleeve. They are to be laid at a depth of 800mm and one end is to be provided with a marker labelled "Telkom".

### C3.2.19 Cables

#### Description

PVC insulated cables for LV shall be to SANS 1507 and shall consist of PVC insulated conductors, PVC bedding, galvanized steel wire armouring and PVC sheath.

The abbreviation for this type of cable is PVCAS.

Paper insulated cables shall, unless otherwise specified elsewhere in this Specification, be of the screened type suitable for use on an earthed system and complying with SANS 197. They shall be lead sheathed, bedded with two bituminised paper tapes and one layer of fibrous material and preferably armoured with two layers of steel tape or alternatively with a single layer of galvanized steel wires, both served with bituminised fibrous material. Such cables shall comply with Table 19 of SANS 197 and shall be non-draining.

They shall have a sheath of lead alloy 'E' and/or be PVC served only if called for elsewhere in this Specification.

The abbreviation for this type of cable is PILCA.

Cross-linked polyethylene cables shall be Type A suitable for use on an earthed system and complying with SANS 1339, being individually screened and armoured, unless otherwise called for elsewhere in this specification.

The abbreviation for this type of cable is XLPE.

Service cables may be multicore PVC insulated and wire armoured and PVC served (PVCAS), concentric neutral or "Airdac" as specified elsewhere in this Specification.

Concentric neutral cables shall be XLPE insulated complying with SANS 1268. "Airdac" cables shall be XLPE insulated with copper conductors, the phase conductor being contained within a radial band of insulated neutral and bare earth conductors, the whole being XLPE served. All cables are to be installed in compliance with the Manufacturer's recommendations.

The sizes indicated are for cables with copper conductors unless otherwise specified. For LV systems aluminium conductor cables may be offered as an alternative, if a price advantage can be shown.

In such cases both the resistance and current carrying capacity of the aluminium cables offered must compare suitably with the sizes of copper conductor indicated. Where cables offered are other than those specified, Scheduled Rates for the supplying, laying, jointing and termination of the cable shall be entered in "Departures from the Specification". The Contractor will be responsible for advising equipment suppliers of the type of cable termination required if a cable other than that specified is accepted.

### **Cable Lengths**

All scheduled cable lengths are for tendering purposes only and the Contractor shall measure the actual lengths required before ordering.

The length of all cables will be re-measured after installation and the lengths indicated in the Bill Schedule of Quantities will be adjusted accordingly. The Contractor will be paid for the actual lengths measured on site and any allowance for snaking, joints or ends must be incorporated in the unit price.

### **Handling of Cables**

Particular care shall be taken in handling drums of cable. Cable drums shall not be dropped or allowed to roll unchecked. The drums shall, under no circumstances, be rolled in any direction other than that indicated by arrows thereon.

When running cable off a drum it shall be properly and securely mounted so as to rotate without difficulty and the spindle supporting it shall be straight, horizontal, supported at both ends and of adequate strength. Cable shall only be removed from the drum by rotating the drum. The inner end of the cable shall be released before running any cable off the drum.

Care is to be taken to ensure that each length of cable is run off the drum sequentially so that a crossed core situation does not arise at joints.

No cable shall be bent to a radius less than 12 times the overall diameter of the cable. Bending or straightening shall be done slowly. PILCA cable shall not be laid if the temperature falls below 10°C.

Should a cable inadvertently become damaged or the lead sheath or end cap punctured, this fact shall be brought to the notice of the Engineer immediately, who shall decide what further action is to be taken. The Engineer shall also be notified immediately should there be any suspicion of moisture having entered a PILCA or XPLE cable.

### **Cables fixed to Surface**

Where cables enter flush boards from cable sleeves, the sleeve shall turn up to floor level and a duct shall be forced in the wall to accommodate the cable. Care shall be taken to ensure that the bending tolerance of the cable is not exceeded in drawing the cable into the sleeve.

The duct shall be of sufficient size to accommodate the cables. The edges of the duct are to be lined with timber battens to which a bevel edged metal cover is to be screwed; using countersunk headed screws and cup washers.

Wherever cable saddles or any other items are to be fixed to structural components, the use of dry plugs of wood will not be permitted. 'Rawl plugs' or other plugs to approval only shall be used. Surface mounted cable protection pipes shall be galvanized and shall be fixed with saddles of 32mm x 3mm galvanized strap bolted to the wall using bolts grouted in, 'Rawlbolts' or similar. All cables rising on the outside of buildings or on poles shall be protected by such pipes to a height of 2,0m above ground level.

Where a cable is installed fixed to a pole, it shall be attached to the pole using stainless steel "Bandit" straps or equal. Care shall be taken to ensure that the straps are tightened correctly and that they do not distort or indent the cable sheath.

### **Cables in Sleeves**

Cables shall pass in and out of buildings and under roadways and pavements in sleeves. In addition, where cables cross or run along a boundary between two plots, these cables shall, where called for, be installed in sleeves. All sleeves shall be installed in accordance with the Clause "Sleeves" elsewhere in this Part.

### **Cables lay in Trenches**

HV cables shall generally be laid 800mm and LV cables at 500mm below ground level. Where two HV cables are run in the same trench, they shall be laid a minimum of 300mm apart with separate cable slabs over each cable. Where HV and LV cables are laid in the same trench, the HV cable shall be located on the roadside and the LV cables on the plot side of the trench. A horizontal distance of not less than 400mm shall be maintained between the cables of different voltage groups. Where a number of LV cables are run in the same trench, they shall be laid with a minimum separation of 100mm. This applies to feeder cables only and not street lighting and service cables, which shall be only 25mm apart. Cables shall not cross each other.

Where cables run across even parallel to lateral boundaries, they shall be located 1,0m from the boundary at a depth of 1,0m. If so specified they shall be run in sleeves, otherwise both HV and LV cables shall be protected by cable slabs and a PVC sheet marker laid 300mm, above them.

The trench bottom shall be cleared of all sharp or protruding stones. The trench is then to be refilled with 150mm of soft material and compacted. A further layer of soft material shall be installed after the cables are laid to provide 200mm cover for the cable when compacted. Protective cable slabs a minimum of 50mm thick x 230mm wide shall then be laid in the case of HV cables, and PVC sheet cable marker strip 450mm wide with indelibly printed warnings every 150mm along its length, in the case of LV cables.

In cases where HV and LV cables run in the same trench, 100mm of soft bedding for the LV cables shall be situated above the protective cable slabs. Where LV service cables or street lighting cables only are installed, a clean trench bottom and soft material back-fill only is required, and no PVC sheet marker.

The soft material described above may be either sand or back-fill material sifted through a 3,0mm mesh grid. Where the bottom of the trench consists of only soft sandy material, the bedding underneath the cable shall be omitted and the cable shall be laid on the trench bottom at the correct depth. Permission must be obtained from the Clerk of Works or the Engineer for the cable bedding to be omitted in such instances.

Where sand has to be brought to site, the quantity must be measured and confirmed by the Engineer or Clerk of Works.

The balance of the trench is to be back-filled with excavated material from which all stones, etc. greater than 100mm in size have been extracted. All such extracted material is to be removed from site.

Cable route markers shall be provided for all HV and main LV feeder cables at road, culvert and Telkom cable crossings, at all changes of direction, at joints and at intervals not exceeding 60 metres along the straight. Cable route markers shall



comprise concrete blocks in the shape of truncated pyramids 300mm high, 150mm x 150mm at the top and 225mm x 225mm at the base. An aluminium plate 3,0mm thick minimum, with four rods 75mm minimum welded to it on the underside, shall be cast into the top of the concrete block, and the plate shall have stamped on it the cable data and direction arrows, and at a crossing, the crossing shall be indicated.

The cable route markers shall be placed over the cable, in the trench way, and shall protrude 25mm above the finished ground level but not where they are likely to cause an obstruction or be in the way of moving traffic. Joint markers shall indicate as such. The Contractor shall ensure that the ground under and around the cable marker is properly compacted.

### **Laying of Cables with other Services**

Where cables are laid in trenches containing water and other pipes, etc., the Contractor shall arrange with the Civil Engineering Contractor and Engineer, to lay the electrical cables along one edge of the trench with the other services occupying the other edge. The cables shall be laid not less than 600mm from such service unless otherwise approved by the Engineer.

At road and services crossings, sleeves as described elsewhere herein shall be provided, one for each HV cable and a separate sleeve for other cables, unless otherwise indicated on the drawings.

At Telkom cable crossings, power cables shall cross 300mm below and at right angles to all such cables or sleeves for future cables. The power cables shall be enclosed in asbestos cement split sleeves with cable slabs over, both of which shall extend 1,0m either side of the crossing. The two sections shall be firmly fastened together with robust stainless steel straps. The full length of all such sleeves shall be covered by cable slabs installed 150mm above the sleeve. No power cable running parallel with a Telkom cable shall be laid within a distance of 1,0m measured horizontally from the Telkom cable. Wherever existing buried Telkom cables are encountered, strict precautions and care shall be taken and close supervision given. Any damage to, or disturbance of Telkom cables whatsoever shall be immediately reported and confirmed in writing to the Engineer.

### **Labelling of Cables**

All cables shall be labelled with 3mm high letters punched onto aluminium tape attached to the cable with aluminium wire. The label shall state the cable size and number of cores. All main feeder cables shall also be labelled to state from whence they are supplied. The labels shall be so installed that they are easily readable.

## **C3.2.20 Cable Joints and Terminations**

### **General**

Cable jointing and termination shall be carried out by a qualified cable jointer using only approved standard methods for the particular type of cable. Proof of his training may be required.

Joints in all cables shall only be made at full drum length intervals, but where necessary and when approved by the Engineer cable through joints may be used in other approved positions.

Where a cable has steel wire armouring all strands of armouring shall be through jointed.

Cable connections shall be made by means of crimped or sweated lugs, firmly bolted, one plain and one lock washer being placed under the nut, so that the plain washer is against the lug and there shall be no washer between the lug and the terminal. A plain washer is also required under the bolt head. Alternatively, sweated stems fitting into clamp connections will be acceptable.

Crimped lugs up to 70mm<sup>2</sup> shall be fitted using manual tools and hydraulic tools from this size upwards. Approved tools are to be used in both cases. A hydraulic tool is to be used on all sizes of aluminium cable.

Where a single point hydraulic crimping tool is used, the lug shall be crimped in three places. Where a hexagonal die is used, this shall extend the full length of the lug.

Where aluminium cored cables are to be connected to circuit breakers, the aluminium cable lug shall be bolted to a copper tag or tail, which is to be connected to the circuit breaker. The Contractor shall ensure that sufficient Densal paste is installed on the faces of the lugs.

Where an aluminium cable is to connect to copper, the lug shall be a bi-metal type lug with a copper spade and an aluminium ferrule friction welded to the spade.

Cable connections shall be made using brass bolts, nuts and washers, together with a star lock washer, on all kiosks, fused feeder panels and mini-subts and with cadmium plated steel bolts and nuts on all indoor equipment. All bolted joints shall be taped with self-vulcanising (not adhesive) tape.

Where cable connections are required to the HV and LV terminals of transformers, these shall be made off as follows:-

- Red Phase to Terminal A
- White Phase to Terminal B
- Blue Phase to Terminal C

All transformer connections shall be kept in strict phase rotation and where two or more units are to operate in parallel, the respective connections are to be checked for phase rotation and polarity. In the case of cable terminations to transformer bushings the cable itself shall be clamped substantially to a post adjacent to the transformer, connections to the bushings being puttied and taped.

All connections are to be colour coded.

HV Cable Terminations

PILCA cables:

PILCA cable shall not be unsealed until all preparations have been made for making-off or jointing, which shall not be carried out during extremely humid or damp

conditions. When a piece of PILCA cable is cut from a long length, the end of the un-used cut length is to be plumbed air and moisture tight.

The end terminations of all PILCA cables at switches, etc., shall be fitted with sealing boxes or chambers, equipped with lead plumbing brass wiping glands duly plumbed to the cable sheath and finally filled with approved compound. The tails of the cable may only be brought out of a cable end box if barrier ferrules are used to prevent the ingress of moisture. Sweated moisture barriers will not be accepted.

For through joints a seamless non-porous type of straight through plumbed joint with cast iron protection box fitted with armour tape clamps and finally filled with compound shall be used. The numbers or colours of the cores shall be matched without twisting at the joints and PILCA cables may, if necessary, be unsealed and then resealed to check this before the second length is laid.

Cable end and through joint boxes shall be filled with MR-3 compound as manufactured by African Bitumen Emulsions.

### **XLPE Cables:**

XLPE cable terminations are to be made in full compliance with the recommendations of the supplier of the termination system.

Where an XLPE cable is terminated onto an item of equipment with a cable box as in the case of switchgear, whether indoor or outdoor, an outdoor type taped termination complete with silicone tape shall be used. The cable box must be effectively sealed against moisture but shall not be compound filled. A standard compression type gland shall be used where the cable enters the cable box. The gland plate shall be effectively earthed to the equipment earth bar.

All through joints in XLPE cables shall be provided with steel protective sleeves covering the joint.

### **Outdoor Terminations:**

All outdoor cable ends to transformer or similar bushings, overhead line equipment or cable ends within mini-subbs shall be made with heat-shrinkable high voltage termination systems suitable for 5 - 69kV as manufactured by Raychem Corporation. The material shall be non-tracking, erosion resistant and shall comply with the manufacturer's appropriate Quality Assurance Schedules Nos. RK 1700 and 1720 as amended. The material shall not be subject to deterioration due to ultra-violet exposure. Heat shrink sheds shall be used to increase the creepage length. The shed closest to the crotch of the cable shall incorporate all three tails of the cable. In cases where cables are to be connected to overhead lines direct, the tail is to be connected to the lightning arrestor termination.

At all outdoor terminations a minimum of 3,0m of cable slack shall be provided adjacent to the termination point.

Where no intermediate connection is available, the cable tails shall be supported by means of pin insulators every 1,5m to avoid vibration in the crotch of the cable. Where a cold tail is joined to the cable tail, this shall be done by means of a barrier ferrule. The heat shrink shall cover the barrier ferrule.

Where the cable tail itself is connected to the lug or stud of an item of equipment, a sealed-end lug shall be crimped onto the tail and the lug connected to the equipment.

The heat-shrink shall cover all but the spade of the lug to prevent the ingress of moisture.

Where a cable tail connects onto an overhead line, a solid centre sleeve shall be crimped onto the cable tail and the sleeve clamped to the line. The heat-shrink is to overlap the sleeve to prevent the ingress of moisture.

Tenderers are to make due allowance for the length of tails in each particular case, since no claim for additional cost for extra-long tails will be considered.

### **LV Cable Terminations**

PVCAS cables shall be made off using adjustable mechanical glands. Care shall be taken to ensure that armour wires are correctly seated in the gland and that all parts are properly tightened. Outdoors, in damp situations and in all mini-sub and kiosks, neoprene-waterproofing shrouds are to be fitted over all glands.

Where cable connections from mini-sub and kiosks to consumers and street lighting are excluded from this Contract, the Contractor shall, nevertheless, ensure that sufficient space is left on the gland plate for the future cables.

Wherever PVCAS cables are terminated to overhead lines a suitable moulded heat shrinkable glove to affect a watertight seal at the crotch shall be used, in accordance with the manufacturer's instructions. Alternatively, a PVC cable cap may be used.

#### **Service cable Terminations**

Service cable ends are to be located in the positions indicated on the drawings. In the general case, the ends are to be located 1,0m from each of the front and lateral boundaries. Where they cross the road in sleeves they are to be located 1,0m into the erf directly opposite the sleeve.

No service cables are to be laid to even directly behind kiosks or at pole positions.

The cables are to be left sealed with a heat shrink cap at a depth of 500mm. Before sealing, each cable is to be checked by the Contractor, in the Engineer's presence if he so decides, to ensure that it is correctly located and labelled at the respective kiosk or pole.

After checking and sealing and while the end of the connection is still exposed, marker posts shall be installed at the end of the connection and vertically above it. The posts shall be manufactured from Y-section fencing standards 1,5m long, split for 75mm at the base and cast into minimum 200 x 200 x 100mm concrete blocks made from the same mix as specified in the Clause "Plinths" elsewhere in this Part. They shall be installed such that 500mm protrudes above ground. Each post shall have a 150mm wide red band painted at the top using approved exterior enamel paint.

### **Cable Testing**

On completed sections of laid, jointed and terminated HV cables, a high voltage DC test of 15 minutes duration shall be carried out by persons qualified to make such tests.

Contractors must note that where such tests will include sections of cable, which have already been in service, the test voltages and duration are to be reduced in accordance with the Engineer's instructions.

Cable tests shall be in accordance with the following:

PILCA cables	-	SABS 97, Annex A-3.3
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XLPE cables - 5000v megger test between cores and to earth unless additional tests are ordered by the Engineer, or are called for elsewhere in this Specification.  
Method - SABS 0198: Part XIII

**CABLES FOR EARTHED SYSTEMS**  
(Based on SABS 97: Table A-2)

Type	PVCAS**	BELTED		SCREENED		XLPE**	
Rated voltage	600/1000	11000	22000	11000	22000	11000	22000
Between conductors - DC	3kV	31kV	60kV	-	-	18kV	36kV
Conductors to screen - DC	-	-	-	19kV	36kV	18kV	36kV
Conductors to earth - DC	3kV	19kV	35kV	19kV	36kV	18kV	36kV

\*\* Test only when specifically called for

\*\* Obtain instructions from the Engineer before testing

### C3.2.21 Labels and Notices

The Contractor shall arrange for the labelling of all equipment, instruments, meters, relays, cables, etc., as indicated below.

Where identical items of equipment can be removed from their housings, e.g. circuit breaker carriages, plug-in relays etc., and both the fixed and with drawable portions are to be labelled identically.

All labels shall be ivory or other back engraved white on black labels of the sizes indicated. They are to be located in purpose made holders or otherwise are to be screwed or riveted into position. "Dymo" tape or similar labels will not be accepted nor will labels, which are glued in position only.

Labels on poles shall comprise an aluminium plate with the designated number. These labels shall be nailed to the pole 1,5m above ground level. Nails shall be electro-galvanized clout nails.

Prior to any equipment being labelled, the Contractor shall request the Engineer to provide a complete labelling schedule for all items of equipment. Under no circumstances is equipment to be labelled in accordance with the tender drawings since any description thereon is for identification purposes during construction only and is unlikely to apply to the completed Works.

The following list indicates the general labelling requirements but does not limit the extent of labelling required, which shall encompass the full extent of the equipment supplied, or in the case of existing equipment, any such which is affected by this Contract.

50mm high lettering:-

Substation and mini-sub designation.

Outdoor switchgear designation.

Transformer designation.

Distribution kiosk and fused feeder panel designation.

20mm high lettering:-  
Main or sub-main board designation.  
Control panel designation.  
Indoor switchgear designation.

10mm high lettering:-

Individual switches on switchgear.  
Cubicles.  
Sub-distribution board designation.  
Poles for OH lines.

5mm high lettering:-

Mini-sub feeder breakers and isolators.  
Distribution kiosk feeder breakers and isolators.  
General distribution switchgear.  
Meters, instruments and relays.  
Multiplying factors.

3mm high lettering:-

This size shall be used to designate the conductor size and number of cores of each cable installed under this Contract. In addition, all feeder cables shall be labelled to state from whence they are fed.

All switchboards shall be provided with a label in both official languages reading "In case of leakage or accidental contact, put off main switch immediately".

All substations, mini-sub, kiosks, transformer rooms and switch rooms shall be provided with notices as required by the Occupational Health and Safety Act. All doors to such locations shall be fitted with the appropriate notices. In the case of mini-sub, these shall comprise at least two 190mm x 190mm design WW7 in accordance with SABS 1186 externally and Hv/s and Lv/S respectively on the inside of all doors, while kiosk doors shall meet the LV requirements only. For all other substations, enclosures etc: "Kontra" Safety Signs as supplied by Mine Safety Appliances or approved equivalent are to be provided, Nos. KM115 and K0711 being used externally and KM112, K0706 and K0710 internally.

Where more than one similar item of equipment is fed from the same board or control panel, the item itself shall be labelled, this being fixed in a permanent position, i.e. not attached to motors, pumps etc., but to bases or adjacent thereto. The lettering shall be 50mm high.

### **C3.2.22 Inspection, Testing and Commissioning**

The Engineer shall have access at all reasonable times to such parts of the Works or the Contractor's premises or the premises of the manufacturer of component parts; as may be necessary for the purpose of inspecting, examining and testing the materials, workmanship and performance of any plant or equipment specified for the Works.

The Contractor shall ensure that all equipment such as switchboards, transformers, mini-sub, kiosks, etc., are inspected and tested at the manufacturer's premises, in the presence of the Engineer.

All wiring is to be subjected to a test voltage of 2kV for one minute without insulation failure.

A Megger test is to be applied with a 500V instrument immediately thereafter to prove the insulation resistance better than 20 megohms.

All meters are to be injection tested to ensure correct operation. All control circuits including motor overloads, relays, etc., are to be operated to ensure the correct functioning of the entire control system.

All equipment necessary to enable the tests to be carried out shall be provided and shall include, inter alia:

Phase rotation meter	500A primary injection test set
Avometer	25A secondary injection test set
500V	2kV DC test set

After completion of manufacture, the following test certificates, signed by the Contractor and the firm executing the tests, shall be provided in duplicate:

Transformer test certificate to SABS.

Test certificate stating that all LV switchboards and control boards have been inspected and their wiring subjected to 2000V DC for 1 minute.

Test certificate stating that all HV switchboards have been inspected and their internal wiring subjected to 2000V DC for 1 minute and HV components to the appropriate voltage as laid down in the applicable SABS or BS Specification.

Any other test certificate for routine tests as laid down in relevant SANS or BS Specification or Codes of Practice applicable to the item in question.

Test certificate in respect of any special tests called for elsewhere herein.

The Contractor shall arrange for any Statutory Government and/or Supply Authority inspection of the installation prior to testing and final commissioning by the Engineer.

On completion of the entire installation or any particular section thereof, as may be decided by the Engineer, commissioning shall be carried out by the Contractor, and any tests the Engineer deems necessary shall be conducted. The Contractor shall supply all equipment necessary for the testing and commissioning procedures.

Prior to commissioning of any transformer, the oil shall be tested and, if necessary, shall be dried out by the Contractor. Should this be necessary, the Engineer must be advised that it is suspected the transformer is damp before any work is undertaken. Transformer wheels shall be solidly chocked. No transformer shall be commissioned without the consent of the Engineer.

During commissioning, all tap change switches are to be correctly set and locked. All wedges and packing in switches and relays shall be removed and each switch and each relay circuit operated.

All protection and small wiring shall be tested with a 500V megger and injection currents passed through the secondary of every circuit to check the proper operation of relays, instruments and protection.



The Contractor shall supply all equipment necessary for the testing and commissioning procedures. The test equipment required at Site shall include, inter alia:

Phase rotation meter  
Suitable cable test set

11 000V phasing sticks  
500V megger  
Signature of 5 000V megger  
Avometer  
Earth resistance test set  
25A secondary injection test set

After completion of the commissioning tests the Contractor shall provide duplicate test certificates relating to cable tests, current injection tests of all instruments, meters and relays and results of earth mat tests.

The Contractor shall give the Engineer at least 14 days notice of the date of any testing or commissioning so that he may be present if he so wishes. Where the Engineer does not himself, or through his representative, attend to witness the tests, then the Contractor may proceed with the test, duly forwarding to the Engineer certified copies of the results obtained. In such cases, the test shall be deemed to have been made in the presence of the Engineer.

In the event of the equipment or installation not passing the tests, the Employer shall be at liberty to deduct from the Contract Price, all reasonable expense incurred by him or by the Engineer in repeating the tests.

### **C3.2.23 Completion Of Works**

Before completion of the Contract any damage which may have been done in the process of the installation shall be repaired and made good, trench or excavation work shall be left in a clean and tidy state and all accumulated debris shall be removed from the Site by the Contractor, to the satisfaction of the Employer and Engineer.

All defects found are to be rectified within one month of written notice of such defects. A penultimate certificate reducing the retention amount to that stated elsewhere in this Specification will only be issued upon submission of As Built Drawings and Operating Manuals as called for elsewhere herein, after completion of all notified defects, and once all test certificates called for in the Clause "Inspection, Testing and Commissioning" elsewhere in this Part have been submitted and accepted by the Engineer.

An appropriate Certificate shall acknowledge practical completion of the Works and the commencement of the period during which the Contractor will be responsible for any defects that may become apparent, and of Maintenance as detailed under the Clause "Maintenance" in Section A of this Part, where applicable.

The Contract will not be deemed to be finally complete until the Engineer's final payment certificate is issued.



### C3.3 Project Specification

This project specification is for the Installation of High Mast Lights at specified areas in Kgetlengrivier Local Municipality.

#### C.3.3.1 General

##### The Site

The Site of this Project is at Kgetlengrivier Local Municipality.

The Proposed Sites for installation of High Mast Lights are:

- Mazista (4 High Mast Lights)
- Reagile Ext 8 (6 High Mast Lights)

High Mast Structures will be erected at locations determined by the Engineer in conjunction with the relevant Councillors/Officials.

## PORTION 2: VARIATIONS AND ADDITIONAL CLAUSES

### PSA GENERAL

#### PSA1 QUALITY (Clause 3.1)

All material used in the Works shall, where such mark has been awarded for a specific type of material, bear the SABS mark. Alternatively, the Contractor shall furnish the Engineer with certificates of compliance of materials, which bear the official mark of the appropriate standard.

#### PSA2 PLANT (Clause 4.3)

Except where the use of plant is essential in order to meet the specified requirements by the Due Completion Date, the Contractor shall use only hand tools and equipment in the construction of those portion(s) of the Works that are required in terms of the Scope of Works to be constructed using labour intensive construction methods.

#### PSA3 CONTRACTOR'S OFFICES STORES AND SERVICES (Clause 4.2)

##### PSA3.1 Contractor's Camp

A Site will be made available by the Employer for the Contractor's camp and depot.

##### PSA3.2 Source of Water Supply

Kgetlengrivier Local Municipality is the water supply authority in the area. The standard tariff charged by the local authority, shall apply for water consumed by the Contractor.

The contractor shall arrange for a temporary water connection and shall be responsible for the all costs related to the metered connection.

The Contractor shall be responsible for any storage facilities which he may require. The Employer does not guarantee the sufficiency or continuity of the supply and no claims will be considered in this regard.

Upon completion of construction the Contractor shall terminate the temporary connection.

**PSA3.3 Source of Power Supply**

The Contractor shall, provide in his tender for the payment of all charges and costs that are associated with making electricity available for purposes of constructing the Works. The distribution of electricity shall be in accordance with the applicable bylaws and regulations of the supply authority.

Upon completion of construction the Contractor shall terminate the temporary connection.

**PSA3.4 Sanitary facilities**

No sanitary facilities are available on site. The Contractor shall at all times during construction of the Works provide adequate sanitary facilities on site so that all employees are at all times within easy reach of sanitary facilities.

**PSA4 TESTING (Clause 7)**

PSA4.1 All test results obtained by the Contractor in the course of his process control of the Works shall be submitted to the Engineer or his Representative prior to requesting inspection of the relevant portions of the Works. Any request for inspection shall be submitted on the prescribed forms that are appended as annexures to the Scope of Works.

PSA4.2 The Contractor shall make suitable arrangements for process control prior to commencement with the Works. Should he intend using site personnel for this purpose he shall ensure that suitably trained and competent personnel take charge of the necessary test work, and that the necessary equipment is at their disposal prior to commencement of the Works. Failure to comply with these requirements shall be just cause for the Engineer to order suspension of the Works without additional remuneration in terms of Clause 5.11 of the Conditions of Contract, or for him to recommend termination to the Employer in terms of Clause 9.2 thereof.

**PSA5 PAYMENT (Clause 8.2)**

Monthly Progress Payment Certificates shall be submitted to the Engineer's Representative on Site not later than the 20th of each month (or as agreed between the Contractor and the Engineer).

All quantity calculations and certificates submitted by the Contractor for checking shall be in

accordance with the standard forms that are appended as annexures to the Scope of Works.

**PSA6 ADJUSTMENT OF PRELIMINARY AND GENERAL ITEMS DUE TO RAIN**

Should the period for completion be automatically extended due to abnormal weather conditions occurring during execution of the Contract as provided for in the Conditions of Contract, no adjustment to the total for time-related preliminary and general items will be applicable.

**PSA7 ADJUSTMENT OF PRELIMINARY AND GENERAL TIME-RELATED ITEMS**

An approved extension of time will qualify the Contractor to receive additional payment for each relevant time related item at a unit rate based on the sum originally tendered for such item, and which shall be fair and reasonable as contemplated in the General Conditions of Contract.

**PSA8 HEALTH AND SAFETY**

The maintenance of safe work practice at all times and in all sections of the execution of the works is embedded in the day to day site activities of all the Contractor's management, staff and workforce on the contract.

However, the introduction of the Construction Regulations in 2003 requires from the Employer to ensure that the Contractor has made adequate provision for the execution of the works within the specifications of said regulations. The following items have been identified as critical towards ensuring the minimum standards of safe work practice:

It must be noted that the lists below are not exhaustive and that many items have been traditionally priced by the Contractor as an integral part of his Preliminary and General items or as part of the overhead costs of other items. The tender document, although not detailed with regards the Construction Regulations, requires that the Contractor ensures adherence to the Occupational Health and Safety Act (Act 85 of 1993) the Construction Regulations, 2003.

**PSA8.1 Fixed-charge Items**

Add the following new Clause (Clause 8.3.5):

Compliance with the Occupational Health and Safety Act  
(Act 85 of 1993) and its regulations and with the Employer's  
Health and Safety Specification.

Unit  
Sum

The fixed charge item shall include but shall not be limited to the following:

- Preparation of Health and Safety Plan,
- Establishment of Health and Safety File,
- Health and Safety Training

- Personal Protective Clothing and Equipment
- Fences, Signs and Barricades
- Establishment of Safety Administration
- Other Health and Safety Fixed-charge Obligations

#### PSA8.2 Time-related Items

Add the following new Clause (Clause 8.4.6):

Compliance with the Occupational Health and Safety Act (Act 85 of 1993) and its regulations and with the Employer's Health and Safety Specification.

Unit  
Sum

The time related item shall include but shall not be limited to the following:

- The employment cost of all health and safety personnel including consultants, health and safety officers, inspectors, supervisors and issuers required in terms of the Contractor's Health and Safety Plan,
- Updating the Health and Safety Plan as needed,
- Carrying out of periodic own audits and follow-up audits,
- Compiling ongoing risk assessments and risk assessment reports as required by the Works,
- Convening of regular safety meetings with the Safety Representatives,
- Accompanying and supporting the Employer or his Safety Agent during ad hoc audits,
- Compilation of monthly safety reports and statistics for the Employer or his Safety Agent,
- Implementation and maintenance of Training
- Maintenance of personal protective clothing and equipment
- Maintenance of fences, signs and barricades
- Implementation and maintenance of safety administration
- Other Health and Safety Time-related Obligations

#### PSA10 SUMS STATED PROVISIONALLY (Clause 8.5)

##### PSA10.1 Contingencies

A Provisional Sum shall be included in the Summary of Schedules for contingencies. No percentage markup will be applicable to any payments made using contingency money other than the mark up included in prices for variations determined in terms of the Conditions of Contract.

**PSA10.2 Contract Price Adjustment**

No contract price adjustment is applicable on this contract

**PSA10.3 Salary for Labour Desk Officer and Community Liaison Officer**

A Provisional Sum has been included in Schedule 1 for a salary to be paid to the Labour Desk Officer and Community Liaison Officer.

In addition to the abovementioned amount, provision is made in Schedule 1 for a mark-up on the amount to be paid. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in the Conditions of Contract.

**PSAB ENGINEER'S OFFICE**

**PSAB1 NAME BOARDS (Clause 3.1)**

Two name boards conforming to the standard requirements of the SAACE and as shown on drawing must be provided and erected at points to be designated by the Engineer.

**PSAB2 FACILITIES FOR THE ENGINEER (Clause 3.2)**

No facilities required

**PSAB3 TELEPHONE (Clause 5.4)**

None.

**PSAB4 TESTING**

**PSAB4.1 General**

No laboratory building or fittings are required by the Engineer. The Engineer will arrange separately with a commercial laboratory of designate specialists to carry out all acceptance control testing, excepting for density control test and moisture content determinations. The Contractor shall remain responsible to carry out the process control testing required by the Standardised, Particular and Project Specifications.

**PSAB4.2 Laboratory Equipment**

The Contractor shall supply the following equipment for the duration of the Contract.

- a) Six concrete cube moulds, 150mm nominal size, as well as a suitable concrete cube curing basin to keep all concrete cubes submerged in water for at least 28 days.

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**PSAB5      *SURVEY ASSISTANT (Clause 5.5)***

None required

**PSAB6      *SURVEY EQUIPMENT***

None required

**PSC      *SITE CLEARANCE***

**PSC1      *DISPOSAL OF MATERIAL (Sub clauses 3.1 and 8.2.1)***

Materials arising from clearing and grubbing shall be disposed of at a suitable spoil site. The Contractor shall be responsible to make his own arrangements for a suitable spoil site. Trees and stumps necessarily removed shall not be burnt unless authorised by the Engineer but shall be cut and stacked at areas designated by the Engineer.

**PSC2      *AREAS TO BE CLEARED AND GRUBBED (Clause 5.1)***

The areas to be cleared and grubbed will be indicated by the Engineer. Should a portion or the whole of the site have been cleared and grubbed by others prior to the start of construction then no clearing and grubbing will be ordered or payment made with respect to the applicable portion of the site.

**PSC3      *PRESERVATION OF TREES (Sub clause 5.2.3.2)***

The penalty in respect of every individual tree, designated as a tree to be preserved, that is damaged or removed unnecessarily by the Contractor, shall be R500. Trees that fall within areas upon which the Works are to be constructed or within areas that the Contractor must occupy for the proper construction of the Works will not be designated for preservation.

**PSC4      *FREEHAUL AND OVERHAUL***

No overhaul will be payable under this contract.

**PSC5      *DEMOLITION OF STRUCTURES (Sub clause 5.2.3.2)***

The existing structures and services may not be damaged unnecessary.

All rubble and unsuitable material shall be removed from site and spoiled at a spoil site of the contractor's selection. No overhaul will be payable.



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**PSD      EARTHWORKS**

**PSD1      CLASSIFICATION FOR EXCAVATION PURPOSES (Clause 3.1.2)**

Delete clause 3.1.2 (a) and clause 3.1.2 (b) and replace with the following:

3.1.2 (a) Soft excavation:

“All material that is not classified as hard rock excavation in terms of clause 3.1.2 (c), boulder excavation class A in terms of clause 3.1.2 (d) or boulder excavation class B in terms of clause 3.1.2 (e) shall be classified as soft excavation”

In clause 3.1.2 (c) (1), replace the words “equivalent to that specified in (b) (1) above” with the words “of mass approximately 35 t, fitted with a single-tine ripper suitable for heavy ripping and of fly wheel power approximately 220 kW.”

In the last sentence of clause 3.1.2 (d), replace the words “intermediate excavation” with the words “soft excavation.”

In the last sentence of clause 3.1.2 (e), replace the words “or intermediate excavation, according to the nature of the material” with the word “excavation.”

**PSD2      SAFEGUARDING OF EXCAVATIONS (Sub-Clause 5.1.1.2)**

Any cost the Contractor may undergo in ensuring the safety of excavations or any additional excavation and backfilling he may have to undertake due to the unstable sides of excavations and trenches shall be held to his account and the various rates for excavation and trenching included in the Schedule of Quantities shall include full compensation therefore.

**PSD3      EXPLOSIVES (Sub-Clause 5.1.1.3)**

May not be used upon this site

**PSD4      DISPOSAL OF SURPLUS MATERIAL (Sub-Clause 5.1.4.3 and 5.2.2.3)**

Add the following to the sub-clause:

“All surplus or unsuitable materials arising from excavations rocks, trees, debris and other unsightly material shall be disposed of at a suitable spoil site.

The Contractor shall be responsible to make his own arrangements for a suitable spoil site”.

**PSD5      PROTECTION OF CABLES (Sub-Clause 5.1.2.3)**

The contractor shall be responsible for the protection and temporary support of the electrical cables during construction and during the demolition of the existing structures. The contractor shall tender a lump sum for this work and payment shall be made monthly pro-rata to the overall progress of the Works.

**PSD6      *BORROW PITS (Sub-Clause 5.2.2.2)***

The Contractor shall be responsible for making his own arrangement regarding the provision of pipe bedding material, if required, from commercial borrow pits. The Contractor shall provide in his tender prices for all royalties payable and for the transport of the material to site.

**PSD7      *FREEHAUL AND OVERHAUL (Sub-Clause 5.2.5.1)***

Add the following to the sub-clause:

No overhaul will be payable under this contract.

**END OF SECTION**

**PSG CONCRETE**

**PSG1 CEMENT (Sub clause 3.2.1)**

Only the use of Ordinary Portland Cement to SABS 471 will be permitted.

**PSG2 CONCRETE FINISHES (Sub clauses 4.4.2)**

Concrete against which earth will be backfilled shall be classified as rough. All exposed concrete surfaces shall be classified as smooth. Degree of accuracy I shall prevail.

**PSG3 STRENGTH OF CONCRETE (Sub clause 5.4.1.5)**

The grade of concrete and nominal size of aggregate shall be as specified on the Drawings. The successful tenderer will be required to submit samples of the coarse and fine aggregate which he proposes using, to the Engineer's Representative(s) for tests regarding the suitability of such aggregates. The Contractor shall prepare trial mixes of the grades of concrete required for the Contract to establish acceptable design mixes. These mixes shall be designed for vibration. All data and reports prepared by the Contractor shall be submitted to the Engineer for information and approval prior to the commencement of concreting operations.

**PSG4 CONCRETE SURFACES (Sub clause 5.5.10)**

**PSG4.1 Wood-Floated Finish**

Where wood floating is specified or scheduled, the surface shall first be given a finish as specified in Sub-Clause 5.5.10.1 of SABS 1200 G after the concrete has hardened sufficiently, it shall be floated to a uniform surface free of trowel marks. The screeded surface shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screed marks.

**PSG4.2 Steel-Floated Finish**

Where steel is specified or scheduled, the surface shall be treated as specified in PSG6.1 except that, when the moisture film has disappeared and the concrete has hardened sufficiently to prevent laitance from being worked to the surface, the screeded surface shall be steel trowelled under firm pressure to produce a dense, smooth uniform surface free from trowel marks.

**PSG4.3 Power-Floated Finish**

Where power floating is specified or scheduled, the surface shall be treated as specified in PSG6.1 except that the screeded surface shall be power-floated to produce a high quality dense, smooth, uniform surface free from trowel marks.

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**PSGA CONCRETE (SMALL WORKS)**

**PSGA1 CEMENT (Sub clause 3.2.1)**

Only the use of Ordinary Portland Cement to SABS 471 will be permitted.

**PSGA2 CONCRETE FINISHES (Sub clauses 4.4.2)**

Concrete against which earth will be backfilled shall be classified as rough. All exposed concrete surfaces shall be classified as smooth. Degree of accuracy II shall prevail.

**PSGA3 STRENGTH CONCRETE (Sub clause 5.4.1.5)**

The grade of concrete and nominal size of aggregate shall be as specified on the Drawings. The successful tenderer will be required to submit samples of the coarse and fine aggregate which he proposes using, to the Engineer's Representative(s) for tests regarding the suitability of such aggregates. The Contractor shall prepare trial mixes of the grades of concrete required for the Contract to establish acceptable design mixes. These mixes shall be designed for vibration. All data and reports prepared by the Contractor shall be submitted to the Engineer for information and approval prior to the commencement of concreting operations.

**PSGA4 ANCHOR AND THRUST BLOCKS**

At tees, bends, terminal valves, end caps, and where otherwise directed, anchor/thrust blocks shall be constructed to dimensions ordered, shown on the Drawings or agreed to by the Engineer. Unless otherwise specified, anchor/thrust blocks and pedestals shall be constructed of prescribed mix 15/37,5 concrete.

The concrete shall be well punned round the pipe and, if in trenches, against the undisturbed faces and bottom of the trench. Backfilling behind or under thrust faces will not be permitted. Excess excavation shall be replaced with the prescribed mix concrete given above for anchor/thrust blocks at the Contractor's expense, unless an item is scheduled to cover payment for over break. Care shall be taken to leave the joints accessible. No anchor/thrust blocks and pedestals shall be concreted until the approval of the Engineer has been obtained.

Anchor and thrust blocks will be measured by volume of concrete; the rate tendered shall include for any formwork required to construct the block.

Should the Contractor offer an alternative method of coupling involving flexible joints, he shall design suitable thrust and anchor blocks in order to prevent movement of the pipeline under operating and test conditions. The working and test pressure to be used by the Contractor for the calculation of anchor and thrust blocks shall be in accordance with the design information that is issued together with the tender. The earth bearing pressure to be used for the calculation of anchor and thrust blocks shall be based on the geotechnical reports which are bound into Section 4.4D of Volume 1. The factor of safety to be used in calculating the above shall be 2,5.

## C3.4 Management

### C3.4.1 Management of the Works

#### C3.4.1.1 Applicable Specifications

All materials and apparatus shall conform to the relevant SABS specifications or British Standard Specifications (if such exist) and interchange ability of similar apparatus is required.

All installation work shall comply with the Code of Practice for the Wiring of Premises, SANS 10142-1, as amended.

#### C3.4.1.3 Construction Programme

The Contractor shall supply within the period stated in the Contract Data a suitable and realistic construction programme that is based on the construction drawings issued by the Engineer, for consideration by the Engineer. This programme shall show the proposed scheduling and methods of execution of the Works, as well as the resources that will be allocated to each item or phase of the Works. Quantities proposed for execution during each month must be shown. In addition, the anticipated cash flow for the Contract, based upon these quantities, shall be shown following the prescribed format.

The Contractor will be expected to progress with the Works in accordance with the approved programme, and shall not deviate from the order of execution shown in the programme without the prior approval of the Engineer or his Representative. Should such approval be given an adjusted programme shall be produced within seven (7) days and submitted to the Engineer for evaluation.

Progress in advance of the programme on certain portions or phases of the Works shall not be considered adequate reason for poor progress on another portion or phase.

#### C3.4.1.4 Drawings, Operation and Maintenance Manuals

All information in the possession of the Contractor that is required by the Engineer's Representative in order to complete the As-Built drawings and to prepare a completion report for the Employer must be submitted to the Engineer's Representative before a Certificate of Practical Completion will be issued for the Works. Similarly, the Contractor will be required to submit full details of all pipes, valves, meters and specials in a suitable loose bound format, including any special operational and maintenance procedures related thereto, for incorporation in the overall operation and maintenance manual for the Scheme prior to the issue of a Certificate of Completion for the Works.

Only figured dimensions on the Drawings may be used in the interpretation thereof, and the Drawings shall not be scaled unless the Contractor is so instructed by the Engineer in writing. The Engineer will upon written request provide any dimensions that may have been omitted from the drawings.

#### C3.4.1.5 Site Administration

An index to the Engineer's standard site administration forms as well as examples of some of the administration forms is appended as in Part C4.6. Acceptance control, record keeping and payment certificates shall be done in accordance with the Engineer's standard system except if the Engineer approves that the Contractor's standard system may be used.

#### C3.4.1.6 Daily Site Diary

The daily site diary in accordance with the pro forma appended in Annexure A shall be kept up to date by the Contractor's Representative and will be signed on a daily basis by the Engineer's Representative.

**C3.4.1.7 Information in Respect of Plant**

Information relating to plant on Site shall be recorded in the daily site diary. In addition, the Contractor shall deliver to the Engineer, on a monthly basis, a detailed summary of construction plant kept on the Site, full particulars given for each day of the month. Distinction shall be made between plant in working order and plant out-of-order. Such inventory shall be submitted by the first day of the month following the month to be reported.

**C3.4.1.8 Information in Respect of Employees**

Information relating to labour and management on Site shall be recorded in the daily site diary in addition, the Contractor shall deliver to the Engineer, on a monthly basis, a detailed summary of supervisory staff, labour employed (own and local labour) by category, and sub-contractors (both local and imported) for each day of the month. Such return shall be submitted by the first day of the month following the month to be reported.

**C3.4.1.9 Rainfall Records**

Rainfall records for the period of construction shall be taken on Site and recorded in the daily site diary. The Contractor shall provide and install all the necessary equipment for accurately measuring the rainfall. The Contractor shall also provide, erect and maintain a security fence plus gate, padlock and keys at each measuring station, all at his own cost. The Engineer or his Representative shall take and record the daily rainfall readings. The Contractor shall be permitted to attend these readings, in the company of the Engineer's Representative. Access to the measuring gauge(s) shall at all times be under the Engineer's control.

**C3.4.1.10 Site Instructions**

Site instructions by the Engineer, addressed to the Contractor at his office on the Site, will be numbered consecutively and will be deemed to have been received by the Contractor's representative unless a break in the sequence of numbers is brought to the notice of the Engineer in writing immediately.

**C3.4.1.11 Site Meetings**

The Contractor and his authorised representative shall attend all meetings held on the Site with the Employer and the professional team at dates and times to be determined by the Engineer. Such meetings will be held to evaluate the progress of the Contract, and to discuss matters pertaining to the Contract which any of the parties represented may wish to raise. It is not the intention to discuss day-to-day technical matters at such meetings.

**C3.4.1.12 Payment Certificates**

Refer to clause PSA5.

**C3.4.1.13 Environmental Management Plan**

Not applicable on this contract

**C3.4.1.14 Community Liaison and Community Relations**

In all dealings with communities through which the Works are to be executed, and in all dealings with workers employed from within such communities, the Contractor shall take due cognizance of the character, culture and circumstances of the specific community, and shall at all times use his best endeavours to avoid the development of disputes and rather to foster a spirit of co-operation and harmony towards the project.

The Contractor shall at all times, keep the Engineer fully informed regarding all matters affecting or negotiated between the Contractor and the community, and he shall attend all liaison meetings as may be arranged by the Engineer and/or the Employer. All matters concerning the community shall be discussed and where possible, resolved at such meetings.

Where any resolution during such negotiations or at such meetings shall be contrary to the terms and provisions of the Contract, the Contractor shall not give effect thereto without a prior written instruction from the Engineer. Where the Contractor is of the opinion that any instruction of the Engineer issued in terms of this clause will result in the incurring of additional costs which

were not provided for in his tendered rates and prices and/or that a delay in the progress of the Works will result, he shall be entitled to submit a claim in terms of Clause 48 of the Contract Data, provided always that the period of twenty-eight (28) days referred to in Clause 48 shall be reduced to three (3) normal working days in respect of all claims submitted in terms of this clause.

#### **C3.4.1.15 Workmanship and Quality Control**

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

The cost of the Contractor's supervision and process control, including all testing carried out by the Contractor, will be deemed to be included in the rates tendered for the various items of work. The Contractor's attention is drawn to the provisions of the various Standardised Specifications regarding the minimum frequency of process control testing that is to be executed. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control of the quality of the Works at all times.

Upon completion and submission of each portion of the Works to the Engineer for examination, the Contractor shall furnish the Engineer with the results of relevant tests, measurements and levels, thereby indicating compliance with the Specifications. The Engineer will not examine or inspect any portion of work submitted for approval unless the request for inspection and approval is accompanied by relevant tests, measurements and levels indicating compliance.

#### **C3.4.1.16 Features Requiring Special Attention**

##### **C3.4.1.16.1 Built-up Areas**

The Contractor's attention is drawn to the fact that the Works will be constructed inside built-up areas. The Contractor shall exercise all necessary precautions and take all necessary steps to ensure the safety and convenience of the public. In addition, the Contractor shall provide access for traffic over and through the works, and for residents to their places of abode, all as described in the Scope of Work. Allowance must be made by the Contractor in his programming for delays resulting from the aforesaid.

The Contractor shall give residents a minimum of 72 hours written notice of his intent to close access to residential stands. The Contractor shall acquire written confirmation from all owners that they are aware of any intended closures of access. No traffic access to a residential stand shall be closed for longer than 48 hours.

##### **C3.4.1.16.3 Care of the Site**

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

##### **C3.4.1.16.4 Control of Water**

The Contractor shall at all times and in all respects be responsible for the handling of storm water from higher-laying areas above the Works, and for the handling of any sub-surface water that may affect the Works.

#### **C3.4.1.16.5 Survey and Setting Out**

The Engineer has established survey beacons on site from which the Contractor can set out the Works. The position and co-ordinates of the permanent survey beacons have been shown on the drawings. The Contractor shall be responsible for the protection of all these survey beacons and reference points from handing over of the beacons to the Contractor to completion of the Works. Property beacons and trigonometrically survey beacons that are disturbed or destroyed during the course of the contract shall be replaced at the Contractor's cost by a registered land surveyor who shall verify such replacement. The Contractor's attention is drawn to the requirements of SABS 1200 A (General), Clause 5.1, in this respect.

The Contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works from the beacons established above and for the provision of all necessary instruments, appliances and labour in connection therewith. Such setting out shall be executed by a registered surveyor. No separate payment shall be made in respect of setting out, such work being deemed as included in the rates tendered for construction of the Works.

The checking of any setting-out or of any line or level by the Engineer shall not relieve the Contractor of his responsibility for the correctness thereof.

If at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required to do so by the Engineer, shall at his own expense rectify such error to the satisfaction of the Engineer, but if such error is based on incorrect data supplied in writing by the Engineer shall, in respect of cost of such rectification, be entitled to make a claim in accordance with Clause 48 of the Contract Data.

#### **C3.4.1.17 Notices, Signs, Barricades and Advertisements**

Notices, signs and barricades (required in terms of Clause 34 of the Conditions of Contract) as well as advertisements may only be erected where approved by the Engineer. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Engineer shall have the right to have any sign, notice or advertisement moved to another location, or to have it removed from the Site of the Works, should it in any way prove to be unsatisfactory, inconvenient or dangerous to the general public.

#### **C3.4.1.18 Unauthorized persons**

The Contractor shall keep unauthorized persons from the works at all times under no circumstances may any person except guards be allowed to sleep on the building site.



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## Part C4: Site Information

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	<u>Page</u>
C4.1 KGETLENGRIVIER Local Municipality Geographical Information	184

## **C4 SITE INFORMATION**

### **4.1 Nature of Ground and Subsoil Conditions**

For the purposes of the Contract it will be deemed that, prior to submitting his Tender, the Contractor acquainted himself fully with the information and data provided within the geotechnical information as stated in the drawings and tender document and/or available from the Engineer during the tendering period and, subject to the provisions of the Conditions of Contract, the Contractor shall have no claim against the Employer in respect of geotechnical or subsurface conditions encountered during the course of the Contract

# **KGETLENGRIVIER LOCAL MUNICIPALITY**

**CONTRACT KRLMTEC/BID: 07/2015-16**

**PLANNING, DESIGN, AND CONSTRUCTION MONITORING  
OF INSTALLATION OF HIGH MAST LIGHTS IN RATSEGAE**

## **PART C5: DRAWINGS**

## Part C5: Tender Drawings

### LIST OF DRAWINGS

