

CONTRACT

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Employer

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C1

CONTRACT

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C1: AGREEMENTS AND CONTRACT DATA

C1.1 FORM OF OFFER AND ACCEPTANCE

A. OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

TENDER NO. MLM/IDS/HML/MTS/24-25: INSTALLATION OF HIGH MAST LIGHTS IN MATHIBESTAD

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 Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

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

The offered total of the prices inclusive of Value Added Tax is:

Amount 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.

Signature: (of person authorised to sign the tender):

Name: (of signatory in capitals):

Capacity: (of Signatory):

Name of Tenderer: (organisation):

Address:

.....

Telephone number: Fax number:

Witness:

Signature:

Name: (in capitals):

Date:

[Failure of a Tenderer to sign this form will invalidate the tender]

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B. ACCEPTANCE

By signing this part of the 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 1 Agreements and Contract Data (which includes this Agreement)
- Part 2 Pricing Data, including the Schedule of Quantities
- Part 3 Scope of Work
- Part 4 Site Information

and the schedules, forms, drawings, and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

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

The Tenderer shall deliver the Guarantee in terms of Clause 6.2.1 of the General Conditions of Contract 2015 within the period stated in the Contract Data, and he shall, immediately after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any other bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data, within 14 days of the date on which this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

Signature:

Name: (in capitals)

Capacity:

Name of Employer (organisation)

Address:

.....

Witness: Signature: **Name:**

Date:

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

C. SCHEDULE OF DEVIATIONS

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 Tender Data and the Conditions of Tender.

A Tenderer's covering letter will not necessarily be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreement reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

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.

Any change or addition to the tender documents arising from the above agreement 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:
.....
6. **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 Tender Schedules, as well as any confirmation, clarification or change 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.

Employer

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Contractor

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FOR THE TENDERER:

Signature:

Name:

Capacity:

Tenderer: *(Name and address of organisation)*

.....

Witness:

Signature:

Name:

Date:

FOR THE EMPLOYER:

Signature:

Name:

Capacity:

Employer: *(Name and address of organisation)*

.....

Witness:

Signature:

Name:

Date:



Employer



Witness 1



Witness 2



Contractor



Witness 1



Witness 2

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)

20..... (year)

at (place)

FOR THE CONTRACTOR:

Signature:

Name:

Capacity:

SIGNATURE AND NAME OF WITNESS:

Signature:

Name:


Employer


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C1.2: CONTRACT DATA

C1.2.1: CONDITIONS OF CONTRACT

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C1.2.1 CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works, Third Edition, 2015", issued by the South African Institution of Civil Engineering (abbreviated title: "GCC 2015").

It is agreed that the only variations from the GCC 2015 are those set out hereafter under "C1.2.1.2 SPECIAL CONDITIONS OF CONTRACT".

C1.2.1.2 SPECIAL CONDITIONS OF CONTRACT

C1.2.1.2.1 GENERAL

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions of Contract shall amplify, modify or supersede, as the case may be, the GCC 2015 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions of Contract hereafter are numbered "SCC" followed in each case by the number of the applicable clause or subclause in the GCC 2015, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the GCC 2015, and an appropriate heading.

C1.2.1.2.2 AMENDMENTS TO THE GCC 2015

SCC 1.1 Definitions

Add the following to the end of subclause 1.1:

"1.1.1.35 "Target Enterprise" means an enterprise as defined in Part E: Small Contractor Development of section C3.3 Particular Specifications in Part C3: Scope of works."

SCC 4.1.1 Extent of Contractor's obligations

Add the following new paragraph to the end of subclause 4.1.1:

"If the contractor fails to achieve the monetary value of the target set by the Employer for contract participation by Targeted Enterprise in terms of Part E: Small Contractor Development of Section C3.3 Particular Specifications in Part C3: Scope of Works, the Contractor shall be liable to the employer for a sum calculated in accordance with the Contract Data and the aforementioned Scope of Works as a penalty for such underachievement."


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SCC 6.8.2 Application of Contract Price Adjustment Factor

Add the following to the end of subclause 6.8.2:

“Referring to the “CONTRACT PRICE ADJUSTMENT SCHEDULE” on page 72 of the GCC 2015, delete the four consecutive paragraphs describing the symbols “L”, “P”, “M” and “F” respectively, and replace them with the following:

“L” is the “Labour Index” and shall be the Consumer Price Index for the province and applicable area as stated in the Contract Data, and as published in Table 14 of the “Additional tables” of the Statistical release P0141 of Statistics South Africa.

“P” is the “Plant Index” and shall be the Producer Price Index for “Plant or similar” as published in Table 4 of the Statistical release P0151 of Statistics South Africa.

“M” is the “Materials Index” and shall be the Producer Price Index for “Electrical material or similar ” industry as published in Table 3 of the Statistical release P0151 of Statistics South Africa.

“F” is the “Fuel Index” and shall be the Producer Price Index for “Diesel fuel” as published in Table 4 of the Statistical release P0151 of Statistics South Africa.”

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C1.2.2: CONTRACT DATA (Applicable to this contract)

PART A: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works (2015) 3rd Edition, published by the South African Institution of Civil Engineering, is applicable to this Contract.

The General Conditions of Contract are not bound into this document but are available at the Contractor's expense. Each party to the contract shall purchase its own copy of the GCC 2015, available from South African Institution of Civil Engineering

Private Bag X200
Halfway House, 1685
South Africa
Tel: 27(0) 11 805 5947 /48 /53

Each item of data below is cross-referenced to the clause in the conditions of the contract to which it applies.

In terms of clause 1.1.1.8 of the General Conditions of Contract for Construction Works (2015) 3rd Edition, published by the South African Institution of Civil Engineering), the following Contract Data apply to this Contract.

The Contract Data consists of two parts. Part 1 contains information provided by the Employer, while Part 2 contains information to be provided by the Contractor.

CONTRACT SPECIFIC DATA

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

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
1.	GENERAL
	<i>Replace the contents of Clause 1.1.1.5 with the following:</i>
Clause 1.1.1.5:	The "Commencement Date" means the date on which the contractor receives written instruction from the Employer to commence with the Works. The instruction to commence with the works will not be issued later than 28 days from the date that the Agreement made in terms of the Form of Offer and Acceptance comes into effect.
Clause 1.1.1.13:	The Defects Liability Period for the Works shall be 365 days.
	<i>Add the following to the end of this definition:</i>
Clause 1.1.1.14:	This clause shall apply mutatis mutandis to any portion or phase of the Works that may be described in the Scope of Works or in the Contract Data, or agreed subsequently between the Contractor and the Employer, and committed to writing. The time for achieving Practical Completion is <u>Three (3) months</u> from the Commencement date, including non-working days, and special non-working days, but excluding Eskom connection activities.
Clause 1.1.1.15:	Name of Employer: Moretele Local Municipality is represented by: The Municipal Manager
Clause 1.1.1.16:	Employer's Agent means any Director, Associate or Professional Engineer/

Employer

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REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
	Technologist appointed generally or specifically by the management of the Employer to fulfil the functions of the Employer's Agent in terms of the Conditions of the Contract. Name of Employer's Agent: Nicholas Manqoba Nkosi, PrTechEng, PMP® of Calibre Consulting Engineers (SA) (Pty) Ltd
Clause 1.2.1.2:	Address of Employer's Agent: 61 Catfish Lane Bronkhorstspuit City of Tshwane 1020
Clause 1.1.1.26	The Pricing Strategy is Re-measurement Contract
Clause 1.2.1 ;	<i>Add the following to the clause:</i> 1.2.1.3 Sent by facsimile, electronic, or any like communication irrespective of it being during office hours or otherwise. 1.2.1.4 Posted to the Contractor's address and delivered by the postal authorities. 1.2.1.5 Delivered by a courier service and signed for by the recipient or his representative.
Clause 1.2.1.2:	The address of the Employer is: Moretele Local Municipality 4065 B, Mathibestad, Makapanstad 0404 Private Bag X 367 Makapanstad 0404
Clause 1.3.6:	<i>Add the following new Clause:</i> The copyright in all documents, drawings and records (prepared by the Employer's Agent) related in any manner to the Works shall vest in the Employer or the Employer's Agent or both (according to the dictates of the Contract that has been entered into by the Employer's Agent and the Employer for the Works), and the Contractor shall not furnish any information in connection with the Works to any person or organisation without the prior approval of the Employer to this effect.
Clause 3.1.3:	The Engineer (Employer's Agent) is, in terms of his appointment by the Employer for the design and administration of the Works included in the Contract, required to obtain the specific approval of the Employer for the execution of the following duties: 3.1.3.1 The issuing of an order to suspend the progress of the Works, the extra cost resulting from which order is to be borne by the Employer in terms of Clause 5.11 or the effect of which is liable to give rise to a claim by the Contractor for an extension of time under Clause 5.12 of these conditions. 3.1.3.2 The issuing of an instruction or order to vary the nature or quantity of the Works in terms of Clause 6.3, the estimated effect of which will be to increase the Contract Price by an amount exceeding R50 000, the evaluation of all variation orders in terms of Clause 6.4 and the adjustment of the sum(s) tendered for General Items in terms of Clause 6.11. 3.1.3.3 The approval of any claim submitted by the Contractor in terms of Clause


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REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
	10.1.
4. Clause 4.1.1 as modified by SCC 4.1.1	CONTRACTOR'S GENERAL OBLIGATIONS The penalty for failing to achieve the monetary value of the target set by the Employer for contract participation by Targeted Enterprise in terms of Part E: Small Contractor Development of section C3.3 Particular Specifications in Part C3: Scope of Works, is 10% of the monetary value by which the achieved monetary value falls short of the target monetary value.
Clause 4.1.2:	<i>Add the following to the clause:</i> The Contractor shall provide the following to the Engineer (Employer's Agent) for retention by the Employer or his assignee in respect of all works designed by the Contractor: 4.1.2.1 a Certificate of Stability of the Works signed by a registered Professional Engineer/ Technologist confirming that all such works have been designed in accordance with the appropriate codes of practice. 4.1.2.2 proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s). 4.1.2.3 design calculations should the Employer's Agent request a copy thereof. 4.1.2.4 engineering drawings and workshop details (both signed by the relevant professional engineer/ technologist), in order to allow the Employer's Agent to compare the design with the specified requirements and to record any comments he may have with respect thereto. 4.1.2.5 "As-Built" drawings in dwg, dgn or dxf electronic format after completion of the Works. The Contractor shall be responsible for the design of the Temporary Works.
Clause 4.3.3:	<i>Add the following new clause:</i> The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2003 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993). Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan. The Contractor shall submit an approved Health and Safety Plan to the Employer's Agent within 14 days from the date that the Agreement made in terms of the Form of Offer and Acceptance comes into effect.
Clause 4.3.4:	<i>Add the following new clause:</i> Contractor's liability as mandatory Notwithstanding any actions which the Employer may take, the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2003, for which he is liable as mandatory. By entering into this Contract, it shall be


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Witness 2


Contractor


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REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
	deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act.
Clause 4.3.5:	<i>Add the following new clause:</i> Contractor to notify Employer The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and its Regulations following any incident involving the Contractor and/or Sub-Contractor and/or their employees. The Contractor shall notify the Employer in writing of all investigations, complaints or criminal charges which may arise pursuant to work performed under this Contract in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Regulations.
Clause 4.3.6:	<i>Add the following new clause:</i> Contractor's Designer The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2003 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract.
Clause 4.3.7:	<i>Add the following new clause:</i> The Ministerial Determination 4, Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour as amended, shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.
Clause 4.10.3:	<i>Add the following new clause:</i> The Contractor shall use local labour in accordance with the requirements contained within the Scope of Work.
Clause 5.3.1:	<i>Add the following:</i> The Contractor shall commence executing the Works within 28 days of the Commencement Date. The documents required before commencement with Works execution are: • Health and Safety Plan (Refer to Clause 4.3) • Initial Programme (Refer to Clause 5.6) • A detailed cash flow forecast (Refer to Clause 5.6.2.6) • Security (Refer to Clause 6.2) • Insurance (Refer to Clause 8.6) • Form C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993' to be signed by the Contractor and the Employer (refer to Clause 4.3 of the GCC 2015 and to paragraph E9. Contractor's Responsibilities in Part E of C3.3 Particular Specifications in the project specifications).
Clause 5.3.2:	<i>Add the following:</i> The time to submit the documentation required (Refer to Clause 5.3.1) before commencement with Works execution is 14 days.
Clause 5.4.2:	The access and possession of Site shall not be exclusive to the Contractor but as set


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REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
	out in the Scope or Works and/or Site information.
Clause 5.6.1:	<i>Add the following to the clause:</i> In this regard the Contractor shall have regard for the phases and sub-phases (if applicable) for the Development, which shall also be the order in which the Permanent Works shall be constructed, unless otherwise agreed between the parties and committed to writing. If phased construction is applicable, the phases and sub-phases will be described in the Specifications and/or will be indicated on the Phasing Plan which forms part of the Drawings.
Clause 5.7.1:	<i>Delete the last paragraph of the clause and replace with the following:</i> No such instruction by the Employer's Agent to expedite progress shall be the subject of additional compensation to the Contractor unless the instruction explicitly states that the Contractor is entitled to additional compensation, and cites the amount of such compensation or the basis upon which it is to be determined.
Clause 5.8.1	The non-working days are Sundays. The special non-working days are the construction industry year-end break and the following statutory public holidays as declared by the National Government: New Year's Day, Human Rights Day, Good Friday, Family Day, Freedom Day, Workers' Day, Youth Day, National Women's Day, Heritage Day, Day of Reconciliation, Christmas Day and the Day of Goodwill. The construction industry year-end break commences on the first working day after 15 December and ends on the first working day after 5 January of the following year.
Clause 5.12.3:	<i>Delete the contents of the clause and insert the following:</i> If an extension of time is granted, other than an extension resulting from abnormal rainfall in terms of Clause 5.12.5, the Contractor shall be paid such additional time-related General Items as are appropriate having regard to any other compensation which may already have been granted in respect of the circumstances concerned.
Clause 5.13:	<i>Delete the contents of the clause and insert the following:</i> 5.13.1 If the Contractor fails by the Due Completion Date to complete the Works, or any specific portion thereof that is identified in the Scope of Works to the extent which entitles him in terms of Clause 5.14.2 to receive a Certificate of Practical Completion for the Works, then the Contractor shall be liable to the Employer for the sum(s) stated below as (a) penalty(ies) for every day which shall elapse between the Due Completion Date for the Works or the specific portion of the Works and the actual Date of Practical Completion of the Works or of the specific portion. The penalty for failing to complete the Works is 0,05% of the total Tender Sum per day, up to a maximum limit of twenty-five thousand rand per day. 5.13.2 If before the issue of a Certificate of Practical Completion for the whole of the Works, or for any specific portion thereof that is identified in the Scope of Works, any further part of the Works has been: 5.13.2.1 certified as complete in terms of a Certificate of Practical Completion; or 5.13.2.2 occupied or used by the Employer, his agents, employees or other contractors (not being employed by the Contractor);

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	then the appropriate penalty for delay referred to in Clause 5.1.3.1 above shall be reduced by the amount which is determined by the Employer's Agent to be appropriate under the circumstances. 5.13.3 The imposition of penalties in terms of Clause 5.13.1 shall not relieve the Contractor from his obligation to complete the Works, nor from any of his obligations and liabilities under the Contract. 5.13.4 All penalties for which the Contractor becomes liable in terms of Clause 5.13.1 shall be accumulative. The Employer may, without prejudice to any other method of recovery, deduct the amounts of all such penalties from any monies in his possession that are or may become due to the Contractor. 5.13.5 The imposition of any penalties in terms of Clause 5.13.1 shall not limit the right of the Employer's Agent of the Employer to act in terms of Clause 9.2.
Clause 5.13.4:	<i>Add the following new Clause:</i> If the Contractor shall, without the prior written permission of the Employer's Agent, in respect of any portions of the Works which are prescribed in the Scope of Work to be executed using labour intensive construction methods, or for which the maximum size and capacity of mechanical plant and equipment is restricted in terms of the Contract: • fail to execute such portions of the Works, or any parts thereof, utilising labour intensive construction methods strictly in accordance with the provisions of the Contract; or • utilise in the execution of such portions of the Works, or any parts thereof, mechanical plant or equipment which is in conflict with the terms of the Contract; or • utilise in the execution of such portions of the Work, workers drawn from sources other than those allowed in terms of the Contract. then the Contractor shall be liable to the Employer for the percentage stated below of the value of the Works so executed in conflict with the provisions of the relevant Scope of Work, as a penalty for non-compliance. The penalty for non-compliance is: 15% of the value of Works specified. The imposition of penalties in terms of this clause shall not relieve the Contractor from his obligation to complete the Works, nor from any of his obligations and liabilities under the Contract.
Clause 5.16.3:	The Latent defect period is 10 years after the issue of the Final Approval Certificate in terms of Clause 5.16.1
Clause 6.1.1:	<i>Add the following to the clause:</i> Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.
Clause 6.2.1:	<i>Add the following to this Clause:</i> The amount of the Surety will be 10% of the Contract Price (including Value Added Tax) at the time that the Agreement comes into effect. The guarantee shall remain valid until the issue of the Certificate or Certificates of Completion in respect of the

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REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
	whole of the Permanent Works. The Pro Forma Form of Guarantee bound into the General Conditions of Contract is replaced by the Form of Guarantee (Deed of Surety ship) which is included in Part C1.3 of this document. This approval or otherwise shall be based upon legal opinion to be provided by the Employer's Agent.
Clause 6.8.2:	The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: The values of the coefficients for calculating the Contract Price Adjustment Factor are: - a = 0.20 - b = 0.35 - c = 0.35 - d = 0.10 The "Consumer Price Index" will be as for the province of <u>North West</u> for the area of <u>Moretele Local Municipality</u>. The base month is the month prior to the month in which the closing date for the tender falls.
Clause 6.8.3:	Price Adjustments for variations in the cost of special materials will be allowed. "The Contractor will be required to provide full details in Part 2 of the Contract Data".
Clause 6.8.4:	In line 8 delete the words "between the Employer and the Contractor".
Clause 10.1.5:	The percentage advance on materials not yet built into the Permanent Works is 80%. The percentage advance on plant not yet supplied to site is 0%.
Clause 6.10.3:	The percentage retention on the amounts due to the Contractor is 10%. The limit of retention money is 5% of the first One Million Rand plus 1.6% of the remaining amount of the tender offer excluding contract price adjustment, contingencies and VAT. A Retention Money Guarantee is permitted.
Clause 6.10.4:	In line 4 delete the word "said" and insert the word "correct".
Clause 6.10.9:	<i>Replace the first sentence of the clause with the following:</i> Within 14 days after the date of final approval as stated in the Final Approval Certificate, the Contractor shall deliver to the Engineer (Employer's Agent) a final statement claiming final statement of all moneys due to him for additional work ordered by the Employer's Agent after the Certificate of Completion date (save in respect of matters in dispute, in terms of Clause 58, and not yet resolved) plus the remainder of retention monies (subject to Clause 49.5.1) retained by the Employer.
Clause 8.6.1.2:	The value of materials supplied by the Employer to be included in the insurance sum is <u>nil</u> . Special Risks Insurance issued by SASRIA is required.
Clause 8.6.1.3:	The limit of indemnity for liability insurance is R5 000 000 per event, the number of events being unlimited. Liability insurance shall include a spread of fire risk.
Clause 8.6.1.1.3:	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is <u>R100 000.00 (one hundred thousand Rands only)</u> .
Clause 6.11.1.3:	Delete "15 %" and replace it with "25%".
Clause 10.4.2, 10.7.1:	Failing Amicable Settlement, unresolved Disputes shall be referred to Arbitration.
E1003 Refer to Part C3: Scope of Works, section C3.3 Particular	CONTRACT PARTICIPATION Requirements in terms of the Reconstruction Development Programme. Target Values

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
Specifications, Part E: Small Contractor Development	In this contract, the minimum target value shall be as follows: • Labour Maximisation: 10% • ABE Support: 25% • HID Supervisory staff: 10% The penalties for not reaching the required target values will be calculated at 20% of the difference between the set target values and the actual target values achieved by the contractor at the completion of the works. No bonuses for achieving the set target values are applicable.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C1.2.2: CONTRACT DATA (Applicable to this contract)

PART B: DATA PROVIDED BY THE CONTRACTOR

The following contract-specific data are applicable to this contract.

REFERENCE	CONTRACT SPECIFIC DATA PROVIDED BY THE CONTRACTOR									
1.	GENERAL									
Clause 1.1.1.9:	Name of the Contractor:									
Clause 1.2.1.2:	The contractor's address for receipt of communication is: Telephone: eMail:									
Clause 37.2.2.3	The percentage allowance to cover all charges for the contractor's and subcontractor's profits, timekeeping clerical work, insurance, establishment, superintendence and the use of hand tools is.....%									
Clause 6.5.1.2.3	The percentage allowance on the net cost of materials actually used in the completed work is%									
6.	PAYMENT AND RELATED MATTERS									
Clause 6.8.3:	The Tenderer shall complete Table 1 below with respect to each of the special materials listed. This information shall be used to calculate the variation in cost of the special materials. The rates and prices for the special materials shall be furnished by the Tenderer, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies. The quoted price to be provided by the Tenderer is the ruling price on the first of the month prior to the month in which the closing date for the Tender falls. Table 1 <table border="1"> <thead> <tr> <th>SPECIAL MATERIALS</th><th>UNIT*</th><th>RATE OR PRICE FOR THE BASE MONTH</th></tr> </thead> <tbody> <tr> <td>High Mast Structure</td><td>each</td><td>.....</td></tr> <tr> <td>LED Luminaire</td><td>each</td><td>.....</td></tr> </tbody> </table> * Indicate whether the material shall be delivered in bulk or in containers. When called upon to do so, the Contractor shall substantiate the above rates or prices with acceptable documentary evidence. Signed on behalf of Tenderer:	SPECIAL MATERIALS	UNIT*	RATE OR PRICE FOR THE BASE MONTH	High Mast Structure	each		LED Luminaire	each	
SPECIAL MATERIALS	UNIT*	RATE OR PRICE FOR THE BASE MONTH								
High Mast Structure	each									
LED Luminaire	each									

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

Clause 6.2.1:	Type of security	Contractor's choice (Indicate "Yes" or "No")
The security to be provided by the Contractor shall be one of the following:	Cash deposit of 10 % of the Contract Sum.	
	Fixed Performance Guarantee of 10 % of the Contract Sum.	
	Retention of 10% of the value of the Works.	
	Cash deposit of 5% of the Contract Sum plus the retention of 5% of the value of the Works.	
	Fixed Performance guarantee of 5% of the Contract Sum plus the retention of 5% of the value of the Works.	


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C1.3: PERFORMANCE GUARANTEE

PRO FORMA

PERFORMANCE GUARANTEE

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Employer's Agent" means:

"Works" means:

"Site" means:

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

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

Amount in words:

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

Amount in words:

"Expiry Date" means:

CONTRACT DETAILS

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

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Employer's Agent of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

- intention whatsoever to create a suretyship;
- 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
- 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
- 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
- 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
- 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
- 5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
- 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

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

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C1.4: AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993

THIS AGREEMENT is made between **Moretele Local Municipality** represented by **The Municipal Manager** (hereinafter called the EMPLOYER) of the one part, herein represented by:

.....
in his capacity as:

AND:

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

.....
in his capacity as:

duly authorised to sign on behalf of the Contractor.

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

Tender No. MLM/IDS/HML/MTS/24-25: INSTALLATION OF HIGH MAST LIGHTS IN MATHIBESTAD

for the construction, completion and maintenance of the works;

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

NOW THEREFORE the parties agree as follows:

1. The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the EMPLOYER'S AGENT from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps the EMPLOYER may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

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

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

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

the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C1.5: RETENTION MONEY GUARANTEE

PRO FORMA

RETENTION MONEY GUARANTEE

The Municipal Manager
Moretele Local Municipality
Private Bag X 367
Makapanstad
0404

Tender No. _____ FOR _____

ISSUED TO: the **Moretele Local Municipality**, represented by **The Municipal Manager** (Hereinafter referred to as "the Employer")

ON BEHALF OF: (Hereinafter referred to as "the Contractor")

In connection with

Tender No. (Hereinafter referred to as "the Contract")

WHEREAS the Employer and the Contractor have agreed that the Contractor may provide a guarantee in lieu of the whole or portion of the retention monies provided for under the Contract;

NOW THEREFORE we, the undersigned, undertake, in accordance with the following provisions, to pay the Employer such amounts as the Employer may, from time to time, demand from us.

1. Each demand by the Employer shall be in writing signed by the Employer and delivered to us at

.....
or such other address as we shall in writing notify to the Employer and shall be accompanied by a certificate complying with Clause 2, signed by the Employer's Agent in office as such in terms of the Contract.

2. The Employer's Agent's certificate referred to in Clause 1 shall certify

- (a) that he is the Employer's Agent in office as such in terms of the Contract,
- (b) that the Contractor is in breach of his obligations under the Contract, and
- (c) that the amount demanded, which amount the certificate shall specify,

- (i) does not exceed the amount of retention monies which, but for this guarantee, would have been retained by the Employer in terms of the Contract at the date of the certificate, less the aggregate of the amounts of retention money actually retained by the Employer and the amounts previously paid by us to the Employer in terms hereof, and
- (ii) does not exceed a genuine estimate of the cost to the Employer of having the breach referred to in paragraph (b) remedied less the aggregate of any amounts withheld by the Employer from payments due the Contractor in terms of the Contract by reason of the breach referred to, and any amount in retention money actually held by the Employer save to the extent that the same had been deducted from any previous demand in terms hereof.

3. We shall within 28 days after our receipt of a demand complying with the provisions of Clauses 1 and 2 make payment to the Employer of the amount demanded at such other address as the Employer shall in writing notify us.

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

4. Subject to compliance with the provisions thereof, our liability to make the payments herein referred to shall be unconditional and shall not be affected nor diminished by any disputes, claims or counterclaims between the Employer and the Contractor.
5. Our aggregate liability under this guarantee is limited to R
6. This guarantee shall expire on the date on which the last of the retention monies, which but for this guarantee would have been retained by the Employer, becomes payable to the Contractor.
7. This guarantee is not transferable and must be produced for endorsement if any part payment is made and must be returned to us against final payment of our aggregate liability or on the date of the expiry of the guarantee in terms of Clause 6, whichever is the earlier.

Signed in the presence of the subscribing witnesses:

At for and on behalf of

on this day of

Signature:

Capacity:

Address:

As Witnesses:

1. Name in Block Letters ...
2. Name in Block Letters


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C1.6: TRANSFER OF RIGHTS

TRANSFER OF RIGHTS AND INDEMNITY

(To be completed during construction by successful Tenderer only)

Claim for materials on-site, Payment Certificate No. Date:

Tender No: For (contract title)

I, the undersigned (name of signatory) in my capacity as
..... of (name of Contractor)

duly authorised hereto on behalf of the Contractor hereby transfer, cede and assign all the Contractor's rights, title and interest in and to the materials and goods, for which evidence of bona fide ownership is attached hereto, unto and in favour of (name of Employer)

Insofar as the Contractor retains actual control of the materials and goods, the right of ownership thereof passes to the Employer by *constitutum possessorium*.

I herewith indemnify the Employer against any claim to and in respect of said materials by reason of the Contractor's sequestration or liquidation or of any defect in the Contractor's title to the materials and agree that no payment for materials on site will be made by the Employer until such time as I have submitted documentary proof of bona fide ownership of the said materials and goods.

This transfer shall become effective upon conclusion of the Contractor receiving payment from the Employer or from any other person on behalf of the Employer for the materials and goods as Materials on Site, payment of retention money thereon excluded.

I further confirm that I am fully responsible for all materials and goods listed under this Transfer of Rights and that they have been insured adequately against all risks and will remain insured until they are built into or used in the permanent works and taken over by the Employer.

This certificate of Transfer of Rights applies only to the materials and goods as listed in the following table.

DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE	AMOUNT	SUPPLIER
TOTAL VALUE OF MATERIALS AND GOODS					

Signed by: Date:
for and on behalf of the Contractor.

Witnessed by: Date:

NOTE: This form, together with the documentary proof of ownership or proof of payment by the Contractor to the supplier, shall accompany the Contractor's claim for payment for materials on site in terms of Clause 6.10.1.5 of the General Conditions of Contract 2015.

C2: PRICING DATA

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

C2.1 PRICING INSTRUCTIONS

1. GENERAL

The Schedule of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract, the Specifications (including the Project Specifications) and the Drawings.

2. DESCRIPTION OF ITEMS IN THE SCHEDULE

The Schedule of Quantities has been drawn up generally in accordance with the relevant provisions of the Standard Specifications.

The short descriptions of the items in the Schedule of Quantities are for identification purposes only and the measurement and payment clause of the Standard Specifications and the Particular Specifications, read together with the relevant clauses of the amendments and additions contained in the Project Specifications and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

For the purposes of this Schedule of Quantities, the following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as defined in the 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 product of the quantity and the rate tendered for an item.

Lump Sum: An amount tendered for an item, the extent of which is described in the Schedule of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.

3. QUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Schedule of Quantities are estimates only, and are subject to re-measure during the execution of the work. The quantities finally accepted and certified for payment, and not the quantities given in the Schedule of Quantities, shall be used to determine payments to the Contractor. The Contractor shall obtain the Employer's Agent's detailed instructions for all work before ordering any materials or executing work or making arrangements for it. The quantities of material or work stated in the Schedule of Quantities shall not be regarded as authorisation for the Contractor to order material or to execute work.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Schedule of Quantities and in accordance with the General and Special Conditions of Contract, the Project Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste. The validity of the contract will in no way be affected by differences between the quantities in the Schedule of Quantities and the quantities finally certified for payment.

4. PROVISIONAL SUMS

Where Provisional sums or Prime Cost sums are provided for items in the Schedule of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract 2015. The Employer reserves the right, during the execution of the works, to


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted by the Employer in the "Amount" column of the Schedule of Quantities and in the Summary of the Schedule of Quantities unless ordered or authorised in writing by the Employer before closure of tenders. Any unauthorised changes made by the Tenderer to provisional items in the schedule, or to the provisional percentages and sums in the Summary of the Schedule of Quantities, will be treated as arithmetical errors.

5. PRICING OF THE SCHEDULE OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Schedule of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Each item shall be priced and extended to the "Amount" column by the Tenderer, with the exception of the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Tenderer omits to price any items in the Schedule of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

Should the Tenderer group a number of items together and tender one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.

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

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Amount" column. "Rate Only" items have been included where:

- (a) an alternative item or material is contemplated;
- (b) variations of specified components in the make-up of a pay item may be expected; and
- (c) no work under the item is foreseen at the tender stage but the possibility that such work may be required is not excluded.

For "Rate Only" items, no quantities are given in the "Quantity" column but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall, however, note that in terms of the Tender Data, the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

Reasonable compensation will be received where no payment item appears in respect of work required in terms of the Contract which is not covered in any other pay item.

All rates and amounts quoted in the Schedule of Quantities shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Schedule of Quantities. Note that fractions of a cent in all rates shall be discounted.

6. CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

7. INTERIM PAYMENTS

Unless otherwise specified, progress payments in Interim Certificates, referred to in Clause 6.10 of the General Conditions of Contract 2015, in respect of "sum" items in the Schedule of Quantities shall be by means of interim progress instalments assessed by the Employer's Agent and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

Notwithstanding any custom to the contrary, the work as executed will be measured for payment in accordance with the methods described in the contract documents under the various items of payment.

Attention is directed to the provisions of Clause 1220 of the Standard Specifications regarding the measurement of quantities for payment. Except where specified otherwise than in Clause 1220, the nett measurements or mass of the finished work in place shall be taken for payment, but any quantity of work in excess of that prescribed shall be excluded.

8. UNITS OF MEASUREMENT

The units of measurement described in the Schedule of Quantities are metric units. The following abbreviations are used in the Schedule of Quantities:

mm	= millimetre	m ³ -km	= cubic metre-kilometre	Prov sum	= provisional sum
m	= metre	l	= litre	kPa	= kilopascal
km	= kilometre	kl	= kilolitre	MPa	= megapascal
km-pass	= kilometre-pass	kg	= kilogram	MN	= meganewton
m ²	= square metre	t	= ton (1 000 kg)	t-km	= ton-kilometre
m ² -pass	= square metre-pass	No	= number	h	= hour
ha	= hectare	%	= percent	dia	= diameter
m ³	= cubic metre	PC sum	= prime cost sum	Sum	= lump sum
kW	= kilowatt	MN-m	= meganewton-metre		

9. CONSISTENCY OF RATES

In order to ensure that payments certified by the Employer's Agent are reasonably consistent with the market value of the work done, and that variations in quantities do not distort the contract valuation, the rates, prices and amounts tendered in the Schedule of Quantities are required to be in balance.

A tender will be considered out of balance if:

- (i) the combined, extended total tendered for the item:

B13.01 The contractor's general obligations:

- (a) Fixed obligations
- (b) Value-related obligations
- (c) Time-related obligations

exceeds a maximum of 15% of the Tender Offer (excluding contingencies, escalation and VAT).

- (ii) the rates, prices or amounts tendered for any other items differ by more than 20 (twenty) percent from either the next highest or next lowest rates, prices or amounts tendered, or else from the latest municipal estimates.

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

Any such unbalanced tender may be rejected if, after fourteen (14) days of having been given written notice by the Employer to adjust those rates or lump sums which are unreasonable or out of balance, the Tenderer fails to make the necessary satisfactory adjustments. These adjustments in rectification will be such that increases are balanced by decreases, leaving the tender offer unchanged.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C2.2. SCHEDULE OF QUANTITIES

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Contractor

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MORETELE LOCAL MUNICIPALITY

Tender No. MLM/IDS/HML/MTS/24-25

THE INSTALLATION OF HIGH MAST LIGHTS IN MATHIBESTAD

		PRELIMINARY AND GENERAL						
ITEM		DESCRIPTION	UNIT	QTY	RATE (R.)		AMOUNT (R.)	LC
A	LIC	Facilities of the Contractor						
A1.1		Allow for site establishment for providing and erecting a fenced site office, all associated services, and for storage of plant materials and equipment including protection thereof. The office shall be compliant with the OSH Act and Construction Regulations.	Sum	1	R	-	R -	
B		Guarantees and Insurances						
B1.1		The total cost of the insurance and guarantees of the works in accordance with the General Conditions of Contract.	Sum	1	R	-	R -	
C		Compliance with Statutory Rights						
C1.1		All work to ensure compliance with the provisions of the OSH Act 85 of 1993 and Construction Regulations 2014 as published in the Government Gazette. This item shall include all costs to provide a safety plan including monitoring, auditing thereof, as well as reporting to the Employer's Agent, on a regular basis.	Sum	1	R	-	R -	
C1.2		All work to ensure compliance with Environment Management Plan and Environmental Management Act	Sum	1	R	-	R -	
D		General Liabilities						
D1.1		Total price for all General Liabilities and items not specified provided elsewhere, but necessary for the satisfactory completion of the project.	Sum	1	R	-	R -	
E		Clearing of Site						
E1.1		Allow for clearing of the site, removal of rubbish, scrap material etc, on completion of the Project.	Sum	1	R	-	R -	
F		Climate Conditions						
F1.1		Allow for expenses that may occur due to rain and other climatic conditions. (Tenderers must consult with the weather Burro on average and expected climatic conditions at the site since the completion date of the Contract cannot be extended).	Sum	1	R	-	R -	
G		Permits and Notices						
G1.1		Supply the project signboard as per municipal standards, erect it on site, and maintain it throughout the construction duration.	Sum	1	R	-	R -	
CARRIED FORWARD							R	

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

ITEM		DESCRIPTION	UNIT	QTY	RATE (R.)	AMOUNT (R.)	LC
J	LIC	PROVISIONAL SUMS					
J1.1		Facilities of the Employer's Agent, such as furnished office, communication costs (cellular telephone), computer facilities complete with printer, modem with 4G connection, etc	Prov	1	R 60,000.00	R 60,000.00	
J1.2		Overheads, charges, and profit on item J1.1 above	%		R -	R -	
J1.3		Allow for the appointment of a Community Liaison Officer (CLO) for the duration of the contract	Month	5	R 5 000.00	R 30,000.00	
J1.4		Overheads, charges, and profit on item J1.3 above	%		R -	R -	
J1.5		Allow for PSC (Project Steering Committee) meetings during the duration of the contract	Month	5	R 3,000.00	R 18,000.00	
J1.6		Overheads, charges, and profit on item J1.5 above	%		R -	R -	
J1.7		Allow for the appointment of a Safety Representative for the duration of the contract	Month	5	R 5 000.00	R 30,000.00	
J1.8		Allow for the appointment of a Local Trainee Electrician for the duration of the contract	Month	5	R 3,500.00	R 21,000.00	
J1.9		Allow for the Extended Public Works compliance consumables and accredited training.	Prov	1	R 10,000.00	R 10,000.00	
J1.10		Overheads, charges, and profit on item J1.9 above	%		R -	R -	
J1.11		Allowance for Eskom Connection Works - this includes facilitating bulk connections from the supply authority, obtaining a budget quotation, seeking approval from the Employer's Agent and the municipality, etc	Sum	10	R 150,000.00	R 1 500,000.00	
J1.12		Overheads, charges, and profit on item J1.11 above	%		R -	R -	
J1.13		Allow an amount for survey and tests, which may be utilized or omitted in full or in part, at the discretion of the Employer's Agent,	Prov	1	R 20,000.00	R 20,000.00	
J1.14		Overheads, charges, and profit on item J1.13 above	%		R -	R -	
TOTAL FOR SECTION J CARRIED FORWARD TO SUMMARY						R	

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

ITEM	LIC	DESCRIPTION	UNIT	QTY	RATE (R.)	AMOUNT (R.)	LC
6		HIGH MAST LIGHTING					
		Hot dip galvanized high mast for 30m mounting height complete including luminaire carriage, hoisting mechanism, etc. mounted on concrete foundation measured elsewhere.					
6.1		Supply	No	10	R -	R -	
6.2		Install	No	10	R -	R -	
		250W LED Floodlight luminaires suitable for high masts, same or similar to OMNistar-md					
6.3		Supply	No	90	R -	R -	
6.4		Install	No	90	R -	R -	
		400W LED Floodlight luminaires suitable for high masts, same or similar to SpectraLED-Gen2					
6.5		Supply	No	Rate	R -	Rate Only	
6.6		Install	No	Rate	R -	Rate Only	
6.7		Supply spares (same specification as item 5.3)	No	10	R -	R -	
6.8		Supply spares (surge protection SPC3/230/10K for item 5.3)	No	10	R -	R -	
		High mast distribution board is complete as specified and installed behind the access door inside the mast, including internal equipment, photocell, etc.					
6.9		Supply	No	10	R -	R -	
6.10		Install	No	10	R -	R -	
		Hydraulic power tool with remote control, to drive the winch					
6.11		Supply	No	1	R -	R -	
6.12		Install	No	1	R -	R -	
		Portable single drum raising and lowering device (winch) complete with stainless steel rope and winch handles.					
6.13		Supply	No	1	R -	R -	
6.14		Install	No	1	R -	R -	
		5 pin, 16A test lead as specified for testing floodlight luminaires at ground level.					
6.15		Supply	No	1	R -	R -	
6.16		Install	No	1	R -	R -	
		Lightning arresters (on top of the mast)					
6.17		Supply	No	10	R -	R -	
6.18		Install	No	10	R -	R -	
6.19		FAT Certificate of Compliance in terms of the SANS specifications	No	10	R -	R -	
TOTAL FOR SECTION 6 CARRIED FORWARD TO SUMMARY						R	

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

MORETELE LOCAL MUNICIPALITY

Tender No. MLM/IDS/HML/MTS/24-25

THE INSTALLATION OF HIGH MAST LIGHTS IN MATHIBESTAD

TENDER SUMMARY

SECTION	DESCRIPTION	TOTAL PRICE
I	PRELIMINARY AND GENERAL	R
J	PROVISIONAL SUMS	R
1	SETTING OUT OF WORK	R
2	FOUNDATIONS	R
3	CONTROL UNIT	R
4	LOW VOLTAGE CABLES, EARTH WIRE AND TERMINATIONS	R
5	EXCAVATIONS FOR CABLE TRENCHES	R
6	HIGH MAST LIGHTING	R
7	QUALITY CONTROL TESTING	R
	NET TOTAL OF TENDER	R
	ADD CONTINGENCIES 5% OF NET TOTAL	R
	TENDER AMOUNT (EXCLUSIVE)	R
	CONTRACT PRICE ADJUSTMENT PROVISION	R 0.00
	ALLOWANCE FOR VAT AT 15%	R
	TOTAL CARRIED FORWARD TO FORM OF OFFER (C1.1)	R

Signed on behalf of the Tenderer: (Signature)

Date:

Tenderer's Name: (Company Name)

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

C3: SCOPE OF WORK

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Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C3.1: STANDARD SPECIFICATIONS

The Standard Specifications on which this contract is based are the following standard specifications.

- SANS 121 - Hot-dip Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods
- SANS 857-1 - Defines metal welding processes and related terms
- SANS 920 - Steel bars for concrete reinforcement
- SANS 1200 A - Standardized specification for civil engineering construction Section A: General
- SANS 1200 AA - Standardized specification for civil engineering construction Section AA: General
- SANS 1200 G - Standardized specification for civil engineering construction Section G: Concrete (Structural)
- +6SANS 1200 GA - Standardized specification for civil engineering construction Section GA: Concrete (small works)
- SANS 1200 H - Standardized specification for civil engineering construction Section H: Structural steelwork
- SANS 1200 HC - Standardized specification for civil engineering construction Section HC: Corrosion protection of structural steelwork
- SANS 1700-14.1/11 - Fasteners Part 14: Hexagon nuts Sections 1 to 11
- SANS 2394 - General principles on reliability for structures
- SANS 9001 - Quality management systems - Requirements
- SANS 9692-1 - Welding and allied processes - Recommendations for joint preparation Part 1: Manual metal-arc welding, gas-shielded metal-arc welding, gas welding, TIG welding and beam welding of steels
- SANS 10142-1 - The wiring of premises Part 1: Low-voltage installations
- SANS 10144 - Detailing of steel reinforcement for a concrete
- SANS 10145 - Concrete masonry construction
- SANS 10160-1 - Basis of structural design and actions for buildings and industrial structures Part 1: Basis of structural design
- SANS 10160-2 - Basis of structural design and actions for buildings and industrial structures Part 2: Self-weight and imposed loads
- SANS 10160-3 - Basis of structural design and actions for buildings and industrial structures Part 3: Wind actions
- SANS 10162-1 - The structural use of steel Part 1: Limit-state design of hot-rolled steelwork
- SANS 10162-2 - The structural use of steel Part 2: Limit-states design of cold-formed Steelwork
- SANS 10162-4 - Structural use of steel Part 4: The design of cold-formed stainless steel structural members
- SANS 10164-2 - The structural use of masonry Part 2: Structural design and requirements for reinforced and prestressed masonry
- SANS 10225 - The design and construction of lighting masts
- SANS 10313 - Protection against lightning – Physical damage to structures and life hazard
- SANS 10389-1 - Exterior lighting Part 1: Artificial lighting of exterior areas for work and Safety
- SANS 10389-3 - Exterior lighting Part 3: Guide on the limitation of the effects of obtrusive light from outdoor lighting installations
- SANS 14713 - Protection against corrosion of iron and steel in structures – Zinc and aluminium coatings – Guidelines
- SANS 15607 - Specification and qualification of welding procedures for metallic materials General rules
- SANS 15609-1 - Specification and qualification of welding procedures for metallic materials Welding procedure specification Part 1: Arc welding
- SANS 15609-2 - Specification and qualification of welding procedures for metallic materials Welding procedure specification Part 2: Gas welding
- SANS 15609-3 - Specification and qualification of welding procedures for metallic materials Welding procedure specification Part 3: Electron beam welding
- SANS 15609-5 - Specification and qualification of welding procedures for metallic materials Welding procedure specification Part 5: Resistance welding procedures
- SANS 15614-1 - Specification and qualification of welding procedures for metallic materials Welding procedure test Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys
- SANS 17660-1 - Welding - Welding of reinforcing steel Part 1: Loadbearing welded joints


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

- SANS 17660-2 - Welding - Welding of reinforcing steel Part 2: Non-loadbearing Welded Joints
- SANS 50025 -Hot rolled products of structural steels
- SANS 60439-3 - Guidelines for quality management system documentation AWS D1.1 -Structural Welding Code – Steel
- SANS 1091 -National Colour Standard
- SANS 1250 -Capacitors
- SANS 1266 -Ballasts
- SANS 475 -Luminaires: Performance requirements
- SANS 60529 - Degrees of Protection provided by Enclosures (IP Code)
- SANS 60598-1 -Luminaires: Part 1. General Requirements and Tests
- SANS 60598-2-5 - Luminaires: Part 2-3. Particular requirements – Floodlights
- SANS 60662 -High-Pressure Sodium Vapour Lamps
- SANS 60923 -Auxiliaries for Lamps (Ballasts)
- SANS 60927 -Auxiliaries for Lamps (Starting Devices)
- SANS 61048 -Auxiliaries for Lamps (Capacitors)
- SANS 61049 -Capacitors (Performance requirements)
- SANS 61347 - Lamp Control Gear: Part 1. General and Safety requirements
- SANS 215 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
- SANS VC 8011 -Lampholders
- ARP 035 - Guidelines for the installation and maintenance of street lighting

C3.2: PROJECT SPECIFICATIONS

The Project Specifications, consisting of two parts, form an integral part of the Contract and supplement the Standard Specifications.

Part A contains a general description of the Works, the Site and the requirements to be met.

Part B contains variations, amendments and additions to the Standard Specifications and, if applicable, the Particular Specifications.

In the event of any discrepancy between a part or parts of the Standard or Particular Specifications and the Project Specifications, the Project Specifications shall take precedence. In the event of a discrepancy between the Specifications (including the Project Specifications) and the drawings and / or the Schedule of Quantities, the discrepancy shall be resolved by the Employer's Agent before the execution of the work under the relevant item.

The Standard Specifications, which form part of this contract, have been written to cover all phases of work normally required for electrical contracts, and they may therefore cover items not applicable to this particular contract.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C3.2: PROJECT SPECIFICATIONS

PART A: GENERAL

1. DESCRIPTION OF THE WORKS

1.1 Location of the Works

The project is located as shown on the locality plan bound into this document in Section C4.1 of the Site Information.

1.3 Overview of the works

The project entails the installation of high mast lights in Mathibestad. The leading activities to be undertaken by the contractor will include, the supply, delivery to the site and erecting of masts, construction of earthworks, layer works, installation and aiming of luminaires, testing and commissioning.

1.4 Extent of the Works

1.4.1 The extent of construction will include but not be limited to:

- (a) Establishment of Contractors Site Camp.
- (b) Proving, exposing, and relocating various electricity, fence lines, water, and sewer services.
- (c) Setting out
- (d) Soil selection, excavation, earthworks, and 'earth mat installation
- (e) Installation of the area lights control unit and/or pole top boxes
- (f) Laying of low voltage cables, earth wire, and associated terminations
- (g) Eskom connections
- (h) Installation of high mast lighting structures
- (i) Test and commissioning including issuing of a certificate of compliance.
- (j) Finishing the roadway to facilitate "limited maintenance" such as cutting-back existing vegetation for the improvement of sight distances and treatment to the shoulder edges for the prevention of silt build-up and improved run-off conditions.

1.5 Detailed Description of the Works

The following description is a broad outline of the works and does not limit the work to be executed by the Contractor in terms of the contract. The quantities of some of the major items indicated in this section are indicative, not absolute, and are provided to define in general terms the overall scope of the project.

Approximate quantities of each type of work to be carried out in accordance with the contract documents are listed in the Schedule of Quantities in Section C2.2

1.5.1 Temporary Works

The main temporary works would be to provide access to properties for the local community on an ongoing, daily basis during the construction. No additional payment would be made for these temporary arrangements.

1.5.2 The Works

The works will consist of:

- The installation of ten (10) high mast lights

1.5.3 Quantities

The leading quantities of the permanent works to be constructed are approximate as follows:

- 30m high mast lights 10
- 250W LED lighting fixtures 10 x 9


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

1.5.4 Accommodation of traffic

The accommodation of traffic forms an integral part of the Contract. Traffic will be accommodated within the road reserve during construction using minor detours and Stop/Go facilities working in half widths.

1.5.5 Accommodation of other contractors

In order to ensure the smooth running of all contracts, the Contractor shall be required to liaise with, cooperate with and accommodate all other contractors working on the site, particularly when such other contractors are working in the same area simultaneously.

1.5.6 Ancillary works

Local Emerging Contractors will be responsible for the construction of concrete works and ancillary works including but not restricted to: excavations, road signs and other general work identified by the contractor. The management of the Emerging Contractors is the Established Contractor's responsibility. No extension of time, standing time or claims for the non-performance of the nominated sub-contractors will be permitted. Therefore, the Established Contractor shall make all reasonable provisions in the construction programme and its implementation to accommodate the Local Emerging Contractors.

1.5.8 Existing services

The Contractor shall make himself acquainted with the position of all existing services before any excavation or other work likely to affect the existing services has commenced.

It is also expected that unknown domestic services crossings requiring relocation or protection may be encountered along the route as the work proceeds. The Contractor shall make every effort to establish the location of these services in any area prior to excavations commencing in that area. Such efforts shall include diligent enquiry and discussions with adjacent landowners, visual surface inspection and exploratory trenching investigation as necessary.

The following major services are expected to be encountered during the construction of the Works:

- Electrical and Telephone Poles
- Water Mains
- Fence Lines
- Water and sanitation services

The Contractor will be held responsible for any damage to known existing services caused by or arising out of his operations and any damage shall be made good at his own expense. Damage to unknown services shall be repaired as soon as possible and liability shall be determined on site when such damage should occur.

1.5.10 Environment

The Contractor's attention is called to Part B of these Project Specifications and to the requirements of Part C: Environmental Management Specification contained in section C3.3 Particular Specifications.

1.5.11 Labour

A Project Liaison Committee (PLC) will be established and will be a vital means of communication between all parties involved with the project. The composition of the PLC comprises representatives of the Employer, the Employer's Agent and formal structures within the community.

The Contractor shall make use of these communication channels and shall appoint from amongst his site personnel a responsible person to participate in the affairs of the PLC, and this representative will be also required to attend the monthly PLC meetings.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

It is mandatory that the Contractor shall interact with the community via proactive project liaison and project participation by its leaders and constituted organisations and forums, as well as through the employment of its people, and these activities shall constitute essential facets of the project.

Local labour is to be used and the employment of such labour is to be done in conjunction with the PLC. The PLC has formed a Labour Committee who shall assist the Contractor with the recruitment of local labourers to ensure an equal distribution of people employed between the various Amakosi or ward Cllrs in the area.

1.5.12 Labour-intensive construction methods

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 bringing about the effective substitution of labour for plant and equipment.

Appropriate portions of the Works included in the Contract shall be executed using labour-intensive construction methods.

Except where the use of plant is essential in order, in the opinion of the Employer's Agent, to meet the specified requirements by the Due Completion Date, or where the use of plant is essential as a result of occupational health and safety considerations, the Contractor shall use only hand tools and equipment in the construction of those portions of the Works that are required in terms of these Project Specifications to be constructed using labour-intensive construction methods.

These portions of the Works shall be constructed utilizing only locally employed labour and/or the labour of local subcontractors, supplemented by the Contractor's key personnel to the extent necessary and unavoidable unless otherwise instructed by the Employer's Agent and in accordance with the further provisions of the relevant sections of Portion B of the Project Specifications. The contractor is required to pay minimum wages for all locally employed labour and/or the labour of local subcontractors as specified by the Employer.

Subject to considerations of occupational health and safety, the portions of the Works to be executed using labour-intensive construction methods are:

- Clearing and grubbing of the Site;
- Excavation for structures up to 1,5 m deep;
- Bedding, selected fill, backfilling and compaction of all pipe trenches irrespective of depth, but assisted by mechanical compaction equipment in order to achieve the specified densities;
- Transportation and spoiling of all trench materials, where the disposal site is located within 20 metres of the source;
- Mixing and placing of concrete;
- Construction of all brickwork required for structures; and
- Cleaning and tidying up of the Site.
- Pulling and laying of cables including bedding.

In respect of those portions of the Works which are not listed above, the construction methods adopted and the plant utilized shall be at the discretion of the Contractor, provided always that the construction methods adopted and the plant utilized 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.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

1.6 Temporary Works

The main temporary works would be to provide access to properties for the local community on an ongoing, daily basis during the construction. No additional payment would be made for these temporary arrangements.

1.7 Maintenance of the Works during the construction period

The Contractor shall take note of the various requirements of the General Conditions of Contract 2015 and the standard specifications with respect to the care and protection of the Works.

The handing-over of the project is described in the Project Specifications. The Contractor shall be responsible for maintaining the works from the date of hand-over until the issue of the Certificate of Practical Completion.

1.8 Testing of materials

A provisional sum has been allowed in the Schedule of Quantities for all acceptance control testing laboratory work to be carried out by the Employer's Agent using commercial laboratory facilities.

Further testing shall include the electrical tests leading to a Certificate of Compliance.

Process control

The Contractor shall arrange for all tests required for process control to be done by a laboratory acceptable to and approved by the Employer's Agent. The Contractor may establish his own laboratory on site or he may employ the services of an independent commercial laboratory. Whatever method is used, the Contractor must submit the results of tests carried out on materials and workmanship when submitting work for acceptance by the Employer's Agent. The costs for these tests shall be deemed to be included in the relevant rates and no additional payment will be made for testing as required.

Acceptance control

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Employer's Agent for acceptance control. However, before accepting any work, the Employer's Agent may have further control tests carried out by a laboratory of his choice.

The cost of such additional tests will be covered by a provisional sum provided in the schedule of quantities, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

1.9 Power supply and other services

The Contractor shall make his own arrangements concerning the supply of electrical power and all other services. No direct payment shall be made for the provision of electrical and other services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

1.10 Construction in confined areas

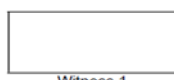
It may be necessary for the Contractor to work within confined areas. Except where provided for in the specifications, no additional payment shall be made for work done in restricted areas. In certain places, the width of the fill material may decrease to zero and the working space may be confined. The method of construction in these confined areas largely depends on the Contractor's construction plant.

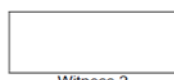
1.11 Contractor's campsite

Possible locations for a campsite shall be pointed out at the clarification meeting.

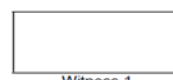
The Contractor shall make his own arrangements for the provision of his campsite and housing for construction personnel but the chosen site shall be subject to the approval of the Employer's Agent, the local authorities and, where applicable, the Project Liaison Committee (PLC) associated with the project.

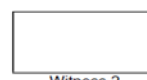

Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

The standard of the Contractor's camp, offices, accommodation, ablution, and other facilities must comply with the requirements of all local authority, environmental and industrial regulations concerned. In establishing and maintaining his campsite, due cognisance is to be taken of the requirements of the Project Specifications.

The Contractor is to fully familiarise himself with all local by-laws and Government regulations for the employment, transport and accommodation of labour on site.

The Contractor shall particularly note that there is a high risk of theft, vandalism and damage to property in this area and strict security will be required for all plant, establishment, temporary works and partially completed works. The Contractor shall be responsible for providing security for all plant, establishment, temporary works and partially completed works. No separate payment shall be made for the provision of such security since full compensation for these costs shall be deemed to be included in the amount tendered for (The contractor's general obligations).

1.12 Additional requirements for construction activities

The travelling public shall have the right of way on public roads, and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

The Contractor's tendered rates shall include full compensation for all costs which may arise from the construction and maintenance of deviations and construction under traffic. No claim for additional costs which may arise from these methods of traffic accommodation and no additional payment owing to inconvenience as a result of the Contractor's method of working shall be considered. The Contractor shall be required to attend meetings of the local Project Liaison Committee (PLC).

1.13 Construction programme

In addition to any other restrictions accommodated by the Contractor in compiling the construction programme, the following constraints shall be taken into account in the preparation thereof:

- (1) The whole of the Works (and the portions of the Works if completion in portions is required) shall be completed within the time period(s) stated (refer to the Contract Data in section C1.2.2).
- (2) Working days lost due to abnormal rainfall shall be treated as set out in clause B1215.
- (3) Allowance shall be made for non-working days and special non-working days (refer to the Contract Data in section C1.2.2).
- (4) Construction activities must comply with all the specified environmental requirements including the requirements of Part C: Environmental Management Specification contained in section C3.3 Particular Specifications.
- (5) Construction activities must comply with all the specified health and safety obligations including the requirements of Part E: OHS 1993 Health and Safety Specification contained in section C3.3 Particular Specifications. This shall include Covid 19 Protocols.
- (6) Strict control of access to and from local public roads shall be required when construction vehicles, plant or equipment leave or enter the site.
- (7) The Contractor's programme of work shall take due cognisance of risks by limiting the duration of the exposure of the various construction elements to natural phenomena.

For the guidance of Tenderers, a provisional preliminary construction programme is included below. This programme is given in good faith and no claims shall be entertained due to inaccuracies, discrepancies or omissions contained in the programme.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

PRELIMINARY CONSTRUCTION PROGRAMME

ACTIVITY		Duration	Month 1			Month 2			Month 3			Month 4			Month 5			Month 6		
		(Days)																		
1	Contract award (execution contractor)																			
2	Compliance with the conditions of the contract																			
3	Site clearance establishment																			
4	Pegging out works and soil selection																			
5	Supplier's design and approval by employer's agent																			
6	Excavation, compaction, and earthing																			
7	Concrete foundation and plinth, including soil and concrete cube tests (including curing period)																			
8	Equipment manufacturing																			
9	Assemble and erect the masts																			
10	Installation of distribution boards																			
11	Installation and aiming of lighting fixtures																			
12	Equipment numbering																			
13	Eskom connection activities																			
14	Excavation and low voltage cabling and earthing																			
15	Tests and commissioning (including issuing of COC)																			
16	Survey as-built drawings, and compilation of the as-built package																			
17	Final inspection																			
18	Snag list clearance																			
19	Reaching practical completion																			
20																				
EXPECTED CASH FLOWS		(in Rands)	R			R			R			R			R			R		

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

2. DRAWINGS

The drawings listed in the table below were prepared and issued by the Employer for tendering purposes. They are issued separately to this document and must be regarded as provisional and preliminary for Tenderers to generally assess the scope of work. The characters in the "Rev. No." column below indicate the revision status of these drawings.

At the commencement of the contract, the Employer's Agent shall deliver to the Contractor three complete sets of A0-A1 paper print drawings copies for construction purposes and any instructions required for the commencement of the works. These A0-A1 paper prints are issued free of charge and the Contractor shall make any additional prints he may require at his own cost. Further drawings detailing some aspects of the contract will be issued after Contract Commencement. From time to time thereafter during the progress of the works, the Employer's Agent will issue further drawings as may be necessary for adequate construction, completion, and defects correction of the works. The work shall be carried out in accordance with the latest revision.

Any information in the possession of the Contractor which the Employer's Agent requires to complete the as-built drawings shall be supplied to the Employer's Agent before a certificate of completion shall be issued. Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Employer's Agent. The Employer's Agent shall supply all figures/dimensions omitted from the drawings.

The levels given on the drawings are subject to confirmation on site, and the Contractor shall submit all levels to the Employer's Agent for confirmation before he commences any structural construction work. The Contractor shall also check all clearances given on the drawings and shall inform the Employer's Agent of any discrepancies.

Drawing No.	Version	Discipline	Drawing Title	Scale	Sheet Size
EE.CCE171.MTS.01	0.0	Electrical	General Arrangement	1:11000	A0
EE.CCE.GD.P.01	0.0	Electrical	Single line Diagramme	NTS	A3
EE.CCE.HMF.01	0.0	Electrical	High Mast Foundation Details	1:25	A3
EE.CCE.PNB.01	0.0	Electrical	Contract Name Board	1:10	A1
EE.CCE.EC.01	0.0	Electrical	Engineer's Camp Floor Plans	1:25	A1
EE.CCE.EC.02	0.0	Electrical	Engineer's Camp Photos	NTS	A1


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

3. **PROCUREMENT**

3.1 **Preferential procurement procedures**

Preferential points shall be allocated and tenders awarded in accordance with T1.2 "TENDER DATA" clause F.3.11.

4. **CONSTRUCTION**

4.1 **Applicable SANS 2001 standards for construction work**

All construction work must conform with the relevant SABS or SANS specifications referred to in the 'Standard Specifications or in Section C3.2: Project Specifications, Part B: Amendments to the Standard Specifications, of this document.

4.2 **Applicable national and international standards**

All items of plant supplied and/or installed, whether expressly specified herein or not, shall conform in respect of quality, manufacture, tests and performance with the requirements of the appropriate South African National Standards (SANS) Specifications and addenda thereto, or, if no such Specification exists covering any one or more of these requirements, with the relevant requirements of the appropriate British Standard Specifications and addenda thereto, except where elsewhere required by this Specification or approved by the Employer's Agent.

4.3 **Particular / generic specifications**

As well as the 'Amendments to the Standard Specifications' contained in Part B of Section C3.2: Project Specifications, of this document, the following Particular Specifications as contained in Section C3.3, are applicable to this Contract:

Part C: Environmental Management Specification
Part D: OHSA 1993 Health and Safety Specification
Part E: Small Contractor Development

C3.2: Project Specifications, amends these references to the 2015 3rd edition of the General Conditions of Contract for Construction Works published by the South African Institution of Civil Engineering which is applicable to this Contract.

4.4 **Certification by recognized bodies**

Where the South African Bureau of Standards has issued a licence for the use of its Mark on products complying with any of its Specifications, only such products which carry the Mark shall be supplied. Preference will be given to plant manufactured in South Africa.

4.5 **Plant and materials provided by the Employer**

No plant and materials are to be provided by the Employer.

5. **MANAGEMENT**

5.1 **Applicable SANS 1921 standards**

The following parts of SANS 1921 and associated specification data are applicable:

SANS 1921-1: 2004: Part 1: General Engineering and Construction works
SANS 1921-6: 2004: Part 6: HIV/AIDS awareness


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

Specification data associated with SANS 1921-1	
Clause No.	Essential data
4.1.7	There are no requirements for drawings, information, and calculations for which the Contractor is responsible.
4.2.1	The responsibility strategy assigned to the Contractor for the works is 'A'.
4.3.1	The programme must conform to clause 1204 'Programme of Work' of the 'Standard Specifications' and clause 5.6 'Programme' of the 'General Conditions of Contract 2015'.
4.3.3	The Contractor must give 24 hours' notice for inspection of work that is to be covered up.
4.7.3	Where applicable, the Contractor is afforded the opportunity of pricing an item to cover costs of unavoidable overbreak.
4.12.2	The samples of materials, workmanship and finishes that the Contractor is to provide and deliver to the Employer are to be as described in clause 1205 'Workmanship and Quality Control' of the 'Standard Specifications' and clause 7 'Quality and Related Matters' of the 'General Conditions of Contract 2015'.
4.12.2	The fabrication drawings that the Contractor is to provide to the Employer are: none.
4.14.5	The Contractor is to provide latrine and ablution facilities as described in Part C 'Environmental Management Plan' in Section C3.3: Particular Specifications of these Project Specifications.
4.14.6	The requirements for the provision and erection of sign boards are as described in clause 1207 'Notices, Signs and Advertisements' of the 'Standard Specifications', and as detailed in the 'Example of Contract Signboard Details' in Section C4: Site Information of these Project Specifications.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are described in clause B1202 of Part B of Section C3.2: Project Specifications.
4.17.3	Services that are known to exist on the site are described in clause B1202 of Part B of Section C3.2: Project Specifications.
4.17.4	The requirements for detection apparatus for locating underground services are: none.
4.18	The additional health and safety requirements are described in Part E 'OHS 1993 Health and Safety Specification' in Section C3.3: Particular Specifications of these Project Specifications.

5.1.1 Additional clauses

5.1.1.1 Site meetings and procedures

Site meetings shall be convened 'Monthly Site Meetings' of the 'Standard Specifications'. The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site memoranda book, a complete set of contract working drawings and a copy of the procurement document, and shall make these available at all reasonable times to all persons concerned with the contract.

5.1.1.2 Water and electricity

The Contractor is to provide water and electricity 'Water' and 1404 'Services' of the 'Standard Specifications'.

Specification data associated with SANS 1921-6	
Clause No.	Essential data
4.2.1(a)	A qualified service provider is one that is an accredited or provisionally accredited training service provider in the HIV/AIDS field. A list of accredited service providers can be obtained from the Construction SETA (CETA) (tel. 011 265 5900), Health and Welfare SETA (HWSETA) (011 622 6852) or on the Health and Welfare SETA website: www.hwseta.org.za .
4.2.1(a)	The HIV/AIDS awareness programme is to be repeated at four monthly intervals throughout the duration of the contract.

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

5.1.2 Additional clauses

The duration of each workshop shall not be less than 2½ hours.

5.2 Recording of weather

The Contractor shall erect a rain gauge and record the rainfall 'Standard Specifications'. This information together with other details of the prevailing weather conditions shall be recorded in the daily site diary.

5.3 Unauthorised persons

The Contractor shall keep unauthorised persons away from the Works at all times. Under no circumstances may the Contractor's personnel be accommodated on the site.

5.4 Management meetings

Management meetings are to be held bi-weekly at a time convenient to all concerned, to discuss planning and health and safety amongst other things. Attendance by the Contractor's and the Employer's Agent's representatives on site is mandatory, and attendance by other interested parties will be by invitation.

5.5 Forms for contract administration

The Employer's Agent's representative will provide standard forms for 'Site Diary', 'Site Memoranda', 'Requests for Inspection' and any others deemed to be necessary during the contract.

5.6 Electronic payments

Payments of approved payment claims will be made electronically upon submission of the Contractor's banking details.

5.7 Daily records

A site diary is to be compiled jointly by the Contractor's and the Employer's Agent's representatives on site and is to be agreed and signed by both parties. The original signed copy is to be retained by the Employer's Agent's representative.

The Contractor is to keep daily records of people and equipment on site in a format to be agreed by the Employer's Agent's representative, and is to provide copies to the Employer's Agent's representative when requested.

5.8 Payment certificates

Details of measurements, proof of payment for items contained in provisional sums, proof of ownership of materials on site and documentation pertaining to contract price adjustment and special materials, are required as substantiation of claims for payment.

5.9 Permits

No security/ entrance permits are required by the Contractor's personnel to enter the site.

5.10 Proof of compliance with the law

There are no requirements for the Contractor to verify compliance with any legislation.


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

C3.2: PROJECT SPECIFICATIONS

PART B: AMENDMENTS TO THE STANDARD SPECIFICATIONS

PROJECT SPECIFICATIONS RELATING TO THE STANDARD SPECIFICATIONS AND OTHER ADDITIONAL SPECIFICATIONS

1. Luminaires

The luminaire shall be equipped with a high-lumen package while offering maximum savings in energy and maintenance costs with a short payback time. The Local Content for the manufacturing of the LED luminaire in the Republic of South Africa must be $\geq 80\%$.

The luminaire shall be installed on high masts with a stirrup bracket to retrofit 400W HID one to one. The luminaire shall be equipped with LED and 250W with a nominal flux of 36058lm. The luminaire shall be equipped with the LensoFlex® photometric system to ensure that the specific requirements of high mast lighting is met.

ThermiX®: The luminaire shall be equipped with efficient thermal management of both the LEDs and the power supply. The luminaire shall be separated between the optical unit (IP66) and the gear compartment (IP66). Cooling fins on the optical unit shall optimize the heat dissipation. The Luminaire shall operate at an ambient temperature (T_a up to 55°C), with a colour temperature of 4000K (CRI) ≥ 70 . The lens optics manufactured from Acrylic PMMA.

The luminaire housing shall be Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300), have a tightness level of IP66, the SANS 60598, SANS 62262 certificate shall be available on request to verify the IP rating. Luminaire shall be powder coated Pearl Light Grey (RAL 9022), textured finish.

The Protector shall be High-impact clear glass with an impact resistance of IK08. The luminaire shall be ROHS compliant.

The lifetime of the LEDS @ $T_Q 25^\circ\text{C}$ shall be rated 100,000h - L70B10, the driver shall be rated 100,000h $\leq 10\%$ failure rate.

The luminaire shall bear the SANS 55015:2013/A1:2015, SANS 61000-3-2:2014, SANS 61000-3-3:2013, SANS 61547:2009, SANS 62493:2015 certification of Electromagnetic compatibility (EMC).

The Employer reserves the right to inspect the luminaries during any stage of manufacturing on the premises of the supplier or manufacturer and to reject any item not complying with the specification.

The following information is compulsory and must be submitted as supporting documentation with the tender document:

- a. Nominal flux output of luminaire
- b. Isolux diagram.
- c. Luminous density diagram.
- d. Complete drawings of fittings.
- e. Origin and manufacture.
- f. Availability of spares.
- g. Suppliers of luminaries.
- h. Photometric design

System Design
9 x Luminaires 250W LED per structure with a nominal flux of 36058lm
30m Mast
300m Spacing
Required minimum lux level of 0.1lx


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

2. Construction of the Mast and Dimensions

The masts shall be constructed from conical sections which, when assembled, will form a tapered column of **circular cross-section**.

The masts shall be of lightweight construction and a base plate shall be welded to the bottom end of the lowest section suitably drilled for foundation bolts.

All welding shall comply with SANS 10225 1991-1 specification. Welding Procedure Specification and shall only be carried out by coded welders tested according to the AWS specification. Proof of the relevant Welding Procedure Specification and Welding Qualification documents must be submitted on request. Inspection and acceptance certificates shall be furnished on request.

The steel used in the manufacture of the mast shall have **a ultimate tensile strength of between 460 and 680 MPa and identical to SABS 1431 grade 355WA steel**.

Proof shall be supplied that the manufacturer is ISO 9001 accredited.

The masts offered shall give an overall floodlight mounting height of 30 m. The cross-section and wall thickness of the mast is determined based on the working loads.

Working Loads

The masts shall be designed in accordance with the SANS 10225 1991-1 Code of Practice for the design and construction of lighting masts. The following site factors shall be considered:

Site	=	Moretele Local Municipality
Design wind speed	=	40m/s (Preliminary)
Category of terrain	=	3 (Preliminary)

The proposed mast shall carry at its top 9 x 250W LED Floodlights evenly around its circumference.

Data on wind-induced oscillations and the dynamic behavior of the mast shall be submitted.

3. Canopy

Each mast shall have a UV protected fibre class canopy that will cover all electrical material on top of the mast against UV light.

4. Raising and Lowering Device

Each mast shall be equipped with a **three-point hoisting mechanism**, consisting of three 6mm diameter stainless steel wire ropes, running over three pairs of Aluminium pulleys on the head frame of the mast running on shafts manufactured from Stainless steel and the bearing/ housing ate manufactured from UV protected UHDPE. All split pins, bolts, nuts and washers shall be of stainless steel. Pulley shafts shall be positively prevented from rotating in their housings.

5. Hoisting Unit

Provision shall be made at the base of the mast to accommodate a removable type, approved oil bath winch of the Dymot /OM type.

The winch shall be of lightweight construction and mounted on a suitable frame for easy transfer from one mast to another, thus not requiring a winch in each mast. It should also, be easily coupled, uncoupled and removable through the door opening provided at the base of the mast.

This shall be a **single drum worm gear type**, self-sustaining at al loads and operating speeds, without the use of brakes and clutches. It shall have a gear ration of at least 50:1 and be suitable for both hand and power operation. The winch shall run in a fully enclosed oil bath.

The winch shall be fitted with a safety device to ensure that the drum is locked positively when the cranking handle or power tool is removed from the driveshaft. The safety device shall be applied automatically.

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

A test certificate, stating the safe working load of the winch and issued by a recognised testing authority, shall be supplied with each winch. Winches shall be fitted with a label and rating plate of a permanent nature in an easily visible position.

6. Hydraulic Power Tool

A Hydraulic power tool is required to drive the single drum winch and shall have the following specifications:

A 1.5 kW single-phase electrical motor running at 1440 rpm. A Hydraulic motor with variable speed ranging between 214 rpm and 268 rpm with a pump delivery of 5.5 L/ min.

7. Access Opening

An access door adequately protected against the weather shall be provided in the mast, with the bottom lintel 600mm above the base plate. The door shall be adequately protected against vandalism and secured by three screws requiring a special opening tool.

A doorframe shall reinforce the opening in the mast.

The mounting strips welded opposite the door opening shall be drilled for the mounting of a control board. Earth terminals, as well as a support bar for the incoming supply cables, shall be provided below the door opening.

8. Corrosion

All parts of the mast and raising and lowering device, not specified as manufactured from stainless steel, shall be hot-dip galvanised in compliance with the requirements of SANS 121 (ISO 1461) 2000-1 and test certificates shall be provided.

No welding, drilling, punching, bending or removal of burrs shall be carried out after galvanising.

9. Hydraulic Power Tool

A flexible, heavy-duty 5-core trailing cable, which runs over a separate set of Aluminium sheaves at the head frame, shall be provided. Sheaves shall be of Aluminium, running on UHDPE shafts. The shafts shall be positively secured from rotating in their housings. The Aluminium sheaves shall be adequately sized to prevent deformation of the cable.

The trailing cable shall be firmly connected to the luminaire carriage at its one end and the clevis plate at the other end. Suitable connectors of the CEE type with an IP44 rating shall be provided.

A fully enclosed IP30 distribution board shall be provided for mounting inside each mast, containing of the equipment depicted on the single-line diagram approved by the Employer's Agent.

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

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

All circuit breakers and isolators shall have a rupturing capacity of 5 kA and shall bear the mark of the S.A.B.S. and shall be accessible through cut-outs in the cover without having to remove the cover.

All equipment shall be clearly marked with engraved labels. No stick-on embossed tape shall be used.

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

10. Foundations

Each mast shall be supplied with foundation bolts and templates. The bolts shall be hot-dip galvanised over their entire length in compliance with SANS 121 (ISO 1461) 2000-1. Two galvanised nuts, two washers and one spring washer shall be supplied for each bolt. The number of foundation bolts shall be determined according to the design of 1.3 above.

A foundation plan, adequately designed for the conditions as per 1.3 of this specification, and based on a soil bearing capacity of 150kPa, giving details of the reinforcing required shall be submitted. Soil pressure and overturning safety factor shall be stated.

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

All reinforcing and foundation bolts shall have a minimum of 100mm concrete cover. The 28 days cube strength of the concrete shall be 25 MPa.

All foundations shall have a circular flat base from which a square plinth shall rise to above the surrounding ground level.

One or two PVC, Class B cable sleeves shall be provided from the centre of the top of the foundation plinth, through the concrete to a point below ground level on the side of the plinth.

After casting of the foundation, the slab shall be covered by earth, and properly compacted. The area around the plinth shall be brought to the original level and shall be left neat and tidy.

The mixture and strength of all concrete shall be in accordance with SANS 1200-Section GA: Concrete and shall be carefully controlled on-site. Cube tests shall be undertaken by an approved authority and the results shall be made available (SANS 10225: 7.12.6).

Test results have to be included in the Handing Over Certificate.

Full design details of the foundations, including concrete mix and strength, foundation bolts, reinforcing, etc. as well as detailed dimensioned drawings, signed by a Registered Professional Engineer, shall be submitted to the Employer's Agent before construction.

Except where otherwise specified, all foundations shall finish at 400mm above the surrounding ground level.

11. Hydraulic Power Tool

Power tool and winch shall consist of 2 x 1.2m earth spikes, installed under the foundation and connected to foundation bolts via 70mm² copper conductors with brass clamps.

12. Earthing And Lightning Protection

All earthing and bonding shall be carried out in accordance with the Standard Code of Practice for the Wiring of Premises and Earthing of low-voltage (LV) distribution systems. SANS 10292 – 2001

The allowance shall be made for the installation of two earthing rods which shall be installed directly underneath each mast. The rods shall be installed before or simultaneously with the casting of the foundation. The earthing rod resistance to earth must be measured in the presence of the Employer's Agent. In the event that the earthing rod resistance to earth exceeds 50-ohm additional earthing rod(s) must be installed and the resistance to earth measured at the tariff quoted in the Schedule of Quantities.

Rods shall be of stainless steel or shall have a steel core with the copper cladding of, at least, 0,25mm² thickness, applied by the molten welded process, to form a microscopic crystalline copper-steel alloy between the two metals, as to ensure that abrasion or bending, during driving, will not damage the outer copper skin. Rods shall be approximately 1,2m in length with provision for screwing together to form a mechanically and electrically continuous rod.

The joint, between the extensible rods, shall not permit the ingress of moisture. The coupling shall be of a material that will inhibit electrolytic action between the coupling and the copper skin on the rod. Allow for a total length of 2,4m of the rod at every mast.

The top of the rod, after installation, shall be at least 50mm above the top surface of the foundation and must not be in direct contact with the concrete, it must be separated by means of a PVC sleeve. The rod shall be connected, by means of the special clamp supplied by the rod manufacturer or the cad-weld method shall be used, to the earth terminal inside the mast, using 70mm² bare copper conductors run through the sleeve leading to the mast interior.

At the base and at the top of the mast, a M12 stainless steel or brass stud shall be welded or brazed to the main body of the mast in a readily accessible position. The luminaires shall be individually bonded to earth terminals in the junction box at the mast head (for more than two luminaires), which terminals shall, in turn, be bonded to the earth stud on the mast body by means of a 10,0mm² green insulated cable. This stud shall be easily accessible to loosen the earth wire for testing purposes.

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

At each mast, the incoming and outgoing cable gland earth lugs shall be connected together by means of stranded flexible copper conductors, using terminal lugs crimped on or soldered to, the mast main earthing stud.

Should the final design of the masts allow for material less than 4 mm wall thickness, a 70sqmm copper strip shall be installed from the top spike to the main earth stud on the foundation to protect the masts and equipment against lightning strikes.

13. Delivery and Erection of Masts

The transportation to site, off-loading and erection of lighting masts forms part of this contract. The Contractor is to make his own arrangements regarding the load, off-load, transport and the selection of a suitable route and obtain the approval of the relevant authorities to transport an abnormal load along the selected route.

Lighting masts and/or sections of masts shall be transported in such a manner that the possibility of damage to mast finishes is minimized.

All masts shall be inspected on-site before it is slipped (connected) together. A slip distance of 1.5 times the maximum (lower) diameter of every section must be maintained as per SANS 10225 Lighting masts shall be erected within 5 working days after its delivery to the site, in order to minimize the obstruction of construction or other traffic and consequent possible damage to the mast. Masts awaiting erection shall be stored in the immediate vicinity of their foundations, in such location as will minimize traffic obstruction. Before commencing the erection of the mast, the Contractor shall consult with Employer's Agent, regarding the precautions necessary to avoid interference with and danger from accidental contact with live electrical overhead lines, telephone lines or traffic, where applicable.

After the erection of the masts, the Contractor will be required to repair any damage to the galvanizing on the masts to the approval of the Employer's Agent.

14. Labelling of the Masts

Lighting masts identification number, engraved with 25mm x 20mm lettering, on a 100mm high and 100mm wide anodized aluminium plate, is to be affixed to the mast shaft at a height of 2,5m above the flange facing the road, by means of two M6 Grade 316 stainless steel bolts drilled and tapped holes located on the side facing the road. The Employer's Agent will specify the required numbers.

15. Cable Access

Each foundation shall have two 110mm diameter non-ferrous cable sleeves leading from the inside of the mast to a point 50mm outside the foundation, 600mm below the final surrounding ground level.

16. Eskom Service Connection

Eskom will use its reasonable endeavours to furnish the Moretele Local Municipality with a reliable and continuous bulk supply of electricity and maintain the quality of supply at the Point(s) of Delivery in compliance with the requirements prescribed in part 2 of NRS 048. The requirements of part 2 of NRS 048 define the voltage quality that shall be supplied under normal circumstances (as defined in part 2 of NRS 048). In accordance with NRS 048 it is incumbent on the Municipality to design and operate its distribution system so that its distribution system will function normally within these requirements.

The contractor shall submit an application to Eskom for the Eskom connection via a dedicated 25kVA or 16kVA "ToL" transformer complete with a meter kiosk housing a smart meter inside. This shall include all relevant strengthening work that is deemed necessary by Eskom which include but not limited to:

- Erecting or extending the MV and /or LV line
- Labelling the infrastructure
- Earthing as per (D-DT-0627, Rev.7)


Employer


Witness 1


Witness 2


Contractor


Witness 1


Witness 2

The 16mm² PVC SWA cable core of the service cable shall be used to supply the high mast lights. The metering kiosk shall be secured to the pole stainless steel strapping. The cable shall be protected by a steel downpipe to avoid theft.

17. Test and Commissioning

The following tests and inspections are required at the commissioning stage:

- Earthing rod resistance test at every mast (max resistance 50 ohms).
- Luminaires in working order.
- Luminaire setting and aiming.
- Full-length lowering and hosting of luminaire carriage.
- Test of switch socket outlet and earth leakage relay.

Provide a Handing over Certificate for every mast containing the following info:

- a. Mast design (SANS 10225).
- b. Mast foundation design (SANS 10100-1:2000).
- c. Soil bearing pressure report.
- d. Result of concrete cube test (SANS 10225: 7.12.6).
- e. Test certificates certifying the load rating of winches; ropes hydraulic equipment and site test. (SANS 10225: 7.12.5).
- f. Certificate of Compliance for the Distribution Board (OHSA).
- g. As-built drawings.
- h. The Pre-Commissioning Checklist is required to be completed by the contractor prior to handing over.

18 Lighting Schedule

The below schedules shall be completed, signed, and returned with the bid documents of which it forms part.

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

Technical Specification – High Mast Lights

Schedule A: Specific requirements of the Employer; Schedule B: Particulars of equipment to be supplied

1	2	3	4
Item	Description	Schedule A	Schedule B
1	Service conditions		
	General		
	a) Ambient air temperature (average) °C	-5 to +40	
	b) Altitude m	1 800	
	c) Average humidity %	95	
	e) Level of pollution to which equipment will be subjected (i.e. light, heavy or very heavy)	Medium	
	f) Lightning conditions	Yes	
2	When erection is required		
	a) Access to the site	Road	
	b) To be offloaded from transport by supplier?	Yes	
	c) Crane available for offloading?	No	
	d) Distance from offloading point to operating position m	xxxxxxx	
	e) Nature of ground to be traversed	Soft earth	
	f) Rise to fall m	xxxxxxx	
	g) Erection prepared steel support structures	Yes	
	h) Construction power supply available if applicable Vac	Yes	
	f) Place of manufacture, NOT assembly, of components	South Africa	
	g) Assembly and testing of the entire equipment	ISO 9001	
3	System Information		
	a) Structure life expectancy years	50	
	b) Luminaires per light No	9	
	c) System anatomy hours/day	12	
	d) System capacity per high mast kW	2.25	
	e) Average coverage (@min 0.2 lux) diameter (m)	300	
	f) Power factor	>0.95	
4	Poles		
	a) Name of Manufacturer	xxxxxxx	
	b) Country of Origin	South Africa	
	c) Height m	30	
	d) Thickness	xxxxxxx	
	e) Wind speed withstand capability km/h	144	
	f) Material	Anti-corrosive steel	
5	Luminaires		
	a) Name of Manufacturer	xxxxxxx	
	b) Country of Origin	South Africa	
	c) Type of luminaire	LED (80)	
	d) Nominal flux at Tq of 25 °C?	xxxxxxx	
	e) Luminaire installation inclination angle	xxxxxxx	
	f) Luminaire Rating normal flux (lm)	36058	
	g) Rated wattage W	250	
	h) Class and type of luminaire of IEC 60598-1 and enclosed	Class 1	
	i) Colour temperature	4000K (neutral white)	
	j) Luminaire efficacy	xxxxxxx	
	k) Colour rendering index	70 (minimum)	
	l) Lighting design standard	SANS ARP 035	
	m) Lumen Depreciation of the LED 60,000 hours (min.)	80% of initial lumens	
	n) LED Module, driver and power supply compartments	IP66	
	o) Material of the LED luminaire housings	Aluminium Grade LM 6	
	p) Hot dip galvanising all ferrous components	SANS 121	
	q) Steel grade for toggle clips, bolts, screws, nuts & washers	Grade 304	
6	Miscellaneous	50	

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

	a) Guarantee/ Warranty period	years	1	
	b) Required period for spares	years	Yes	
	c) Hydraulic power tool, winch and test lead			

Technical Specification – Low Voltage Cables

Schedule A: Specific requirements of the Employer;

Schedule B: Particulars of equipment to be supplied

1	2	3	4
Item	Description	Schedule A	Schedule B
1	Cable Specification a) Name of Manufacturer b) Country of Origin c) Symmetrical fault level for power cables only kA e) Earth fault level for power cables only kA f) Conductor size 16mm ² g) Type of LV cable (Insulated wire, power or multi-core control) h) Number of cores i) Marking requirements j) Technical Catalogue to be provided. k) Certified copy of type test to be provided	xxxxxxxx South Africa 1.5 1.8 16 Power 4 Required Required SANS 1507	
	Any deviations offered to this specification shall be listed below with reasons for deviation. In addition, evidence shall be provided that the proposed deviation will at least be more cost-effective than that specified by the Client.		
Item	Proposed Deviation	Schedule A	Schedule B

Signed:

Date:

Name:

Position:

Enterprise:

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

C3.3: PARTICULAR SPECIFICATIONS

In addition to the Standard Specifications and the Project Specifications, the following Particular Specifications shall apply to this contract and are bound in hereafter:

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION	C67
PART D: OHSA 1993 HEALTH AND SAFETY SPECIFICATION	C71
PART E: SMALL CONTRACTOR DEVELOPMENT.....	C77

Employer	Witness 1	Witness 2	Contractor	Witness 1	Witness 2

C3.3 PARTICULAR SPECIFICATIONS

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

C.1 General

In order to ensure that the construction work is carried out in an environmentally sensitive manner, strict compliance with the Environmental Management Plan (EMP) guidelines is required. The purpose of the EMP is to:

- Encourage good management practices through planning and commitment to environmental issues,
- Provide rational and practical environmental guidelines to:
 - i. Minimise disturbance of the natural environment,
 - ii. Prevent pollution of land, air and water,
 - iii. Prevent soil erosion and facilitate re-vegetation.
- Adopt the best practicable means available to prevent or minimise adverse environmental impact,
- Develop waste management practices based on prevention, minimisation, recycling, treatment or disposal of wastes,
- Train employees and contractors with regard to environmental obligations.

C.2 Training and Induction of Employees

- The Contractor has a responsibility to ensure that all those people involved in the project are aware of and familiar with the environmental requirements for the project (this includes subcontractors, casual labour, etc.). The EMP shall be part of the terms of reference for all contractors, subcontractors and suppliers.

C.3 Complaints Register and Environmental Incident Book

Any complaints received by the project team from the public will be recorded. The complaint should be brought to the attention of the site manager, who will respond.

The following information must be recorded:

- Time, date and nature of the complaint,
- Type of communication (telephone, letter, etc),
- Name, contact address and telephone number of the complainant,
- Response and investigation undertaken and
- Actions taken and by whom.

All complaints received will be investigated and a response given to the complainant within 14 days.

All environmental incidents occurring on the site will be recorded. The following information will be provided:

- Time, date, location and nature of the incident,
- Actions taken and by whom.

C.4 Site Cleanliness and Neatness

- Location of a construction camp is to be approved by the Employer's Agent and is to be restored to its previous condition after completion of construction.
- The construction camp should preferably be fenced with a 1.8m bonnox fence or similar approved.
- All materials, equipment, plant and vehicles must be stored within the construction camp.


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- A dedicated area must be made available for construction staff to change and store their personal belongings.

C.5 Access

- Access to existing roads, schools, buildings, shops and residential properties must not be impeded during construction.
- Access roads utilised by the Contractor must be maintained in good condition.

C.6 Borrow Pits

- Mining authorisations (permits) for borrow pits must be obtained from the Department of Minerals and Energy (DME) in consultation with the Department of Water Affairs and Forestry (DWAF).
- Spoil dumps resulting from borrow pits must not interfere with any natural surface drainage.
- Borrow pits must be rehabilitated after use in accordance with the requirements of DME and DWAF.

C.7 Dust Control / Air Quality

- Dust suppression measures must be implemented during construction by ensuring that all surfaces prone to dust generation are kept damp (e.g. use of water tanker).
- Ensure that vehicles and equipment are in good working condition and that emissions are not excessive.
- Special care must be taken in areas where the route passes close to schools and residential areas.
- The speed of construction vehicles must be reduced.

C.8 Fauna

- Contractor staff may not chase, catch or kill animals encountered during construction.

C.9 Fire Prevention and Control

- Smoking is prohibited in the vicinity of flammable substances.
- The contractor must ensure that fire-fighting equipment is available on site, particularly where flammable substances are being stored or used, and that construction staff are aware of where it is kept and how it is operated.
- Fires started for comfort (warmth) are prohibited, due to the risk of veld fires and risk to adjacent property owners' lands.

C.10 Grave Sites

- Gravesites in close proximity to the road must not be disturbed during construction.

C.11 Materials Handling and Spills Management

- Any hazardous materials to be used during construction (e.g. lime, fuel, paint, etc) are to be stored in a designated area at the campsite.
- The storage containers/facilities (including any diesel/petrol tanks) must be placed on an impermeable surface and surrounded by a bund wall, in order to ensure that accidental spillage does not pollute the environment.
- Workers must at all times be made aware of the health and safety risks associated with any hazardous substances used (e.g. smoking near fuel tanks), and must be provided with appropriate protective clothing/equipment in case of spillages or accidents.
- Ensure all staff and contractors undergo relevant training in the maintenance of equipment to prevent the accidental discharge or spill of fuel, oil, lubricants and other chemicals.
- Any spill of potentially hazardous materials must be cleaned up immediately (Potentially


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- hazardous materials on site include paint, oil, grease, fuel, turpentine, etc).
- The area of contaminated soil or spill must be deposited into the hazardous waste container(s).
- The contractor should keep Peat Sorb or a similar absorbent on site to clean up any spills. The absorbent must be stored in a designated area and be available for inspection.
- All spills are to be recorded in the environmental incident book.

C.12 Noise

- Noise generating activities must be restricted to between 07h00 and 17h00 Monday to Friday, unless otherwise approved by the appropriate competent person in consultation with adjacent landowners/affected persons.
- All equipment, vehicles and machinery must be in good working condition and be equipped with sound mufflers if necessary.
- Construction staff must be trained and made aware of not creating unnecessary noise such as hooting and shouting.

C.13 Pollution Control

- Soil and water pollution through usage of fuel, oil, paint, bitumen or other hazardous substances must be avoided.
- All construction vehicles are to be maintained in good working order so as to prevent soil or water pollution from oil, fuel or other leaks, and to reduce noise pollution.

C.14 Rivers and Streams

- During construction of bridge structures, there must be no obstruction of the water flow of rivers and streams.
- Excavated material must not be stockpiled on or near riverbanks, in order to prevent sedimentation occurring.
- Erosion control measures must be employed both during and after construction.
- No impediments to natural surface water flow, other than approved erosion control measures, must occur.

C.15 Safety

- Safety measures, such as detour signs, must be implemented during construction to ensure the safety of workers, pedestrians and drivers/passengers in vehicles in the vicinity of construction work.
- Special care must be taken in the vicinity of schools to ensure the safety of children wishing to cross the road within the proximity of the construction site.
- Accommodation must be made for pedestrian pathways alongside the road during the construction and operation phases.
- Covid 19 protocols must be adhered to at all times.

C.16 Soil Management

- Accidental spills of contaminants onto the ground e.g. oil, concrete, fuel and chemicals should be removed together with the contaminated soil.
- If necessary an absorbent such as Peat Sorb should be used to aid in cleaning up the spill. The contaminated soil should be disposed of in an appropriate container, depending on its classification.
- Servicing and refuelling of vehicles must only be carried out at the construction camp.

C.17 Worker Conduct

Code of Conduct for Construction Personnel:

- Do not leave the construction site untidy and strewn with rubbish which will attract animal pests.
- Do not set fires.


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- Do not cause any unnecessary, disturbing noise at the construction camp/site or at any designated worker collection/drop off points.
- Do not drive a construction-related vehicle under the influence of alcohol.
- Do not exceed the national speed limits on public roads or exceed the recommended speed limits on the site.
- Do not drive a vehicle which is generating excessive noise or gaseous pollution (noisy vehicles must be reported and repaired as soon as possible).
- Do not litter along the roadsides, including both the public and private roads.
- Do not pollute any water bodies (whether flowing or not).
- No member of the construction team is allowed to enter the areas outside the construction site.

C.18 Traffic Disturbances and Diversions

- Any traffic diversions must be undertaken with the approval of all relevant authorities and in accordance with all relevant legislation.
- Wherever possible, traffic diversion must only take place on existing disturbed areas and remain within the existing road reserve.
- Traffic diversion routes must be rehabilitated after use.

C.19 Vegetation

- Only vegetation falling directly on the route must be removed where necessary.
- Alien vegetation within the road reserve must be eradicated, and management measures must be implemented for future control of these species.
- Vegetation that has been removed from large areas (e.g. on traffic diversion routes) during construction must be replaced with indigenous vegetation after construction has been completed.

C.20 Waste Management

- All general, non-hazardous waste must be placed in a skip container and disposed of at a registered waste disposal site.
- The contractor is to ensure that the portable toilet facilities at the campsite are properly maintained and in working order.
- No disposal, or leakage, of sewage must occur on or near the site.
- All hazardous waste (e.g. oil, paint, empty lime bags, contaminated wash water, etc) must be stored in leakproof containers and disposed of at a registered hazardous waste disposal site.
- The contents of waste storage containers must, under no circumstances, be emptied to the surrounding area. In general, littering, discarding or burying of any materials is not allowed on site or along the route.
- Adequate waste receptacles must be available at strategic points around the construction camp and site for all domestic refuse and to minimise the occurrence of littering.
- Concrete rubble must be collected and disposed of as directed by the Project Manager.
- Each working area must be cleared of litter and building waste (e.g. rubble, wood, concrete packets, etc) on completion of the day's work.
- Any spill around the container(s) should be treated as per Section C.11 and C.16.


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C3.3 PARTICULAR SPECIFICATIONS

PART D: OHSA 1993 HEALTH AND SAFETY SPECIFICATION

D1. SCOPE

This specification covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy working environment for all employees, subcontractors, the Employer, the Employer's Agent, inspectors and all other persons entering the site of works.

This specification shall be read in conjunction with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993 and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Act and Construction Regulations. This includes all relevant Covid19 regulations and protocols.

In terms of the OHSa Agreement in Section C1.4 of the Contract document, the status of the Contractor as mandatory to the Employer (client) is that of an employer in his own right, responsible for compliance with all provisions of OHSa 1993 and the Construction Regulations 2014.

This specification and the Contractor's own Health and Safety Plan as well as the Construction Regulations 2014, shall be displayed on site or made available for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representative trade unions and any other persons entering the site of works.

D1.1 Information based on the Employer's baseline risk assessment

The information presented in this subclause D1.1 is based on the Employer's baseline risk assessment prepared specifically for this contract.

This information describes the type of work required in terms of this contract that will be accompanied by dangers, hazards and risks which the Contractor shall be required to identify, analyse, manage, monitor and review in terms of the Health and Safety Plan and risk assessments.

This information is neither prescriptive nor exhaustive, and is provided as a guideline to Tenderers in preparing their tender submissions, and to the successful Contractor as a basis for the preparation of the site specific risk assessments to be performed by the Contractor in terms of Construction Regulation 9.

Tenderers shall make their own assessment of the dangers, hazards and risks that can be expected during the course of this contract, which may include dangers, hazards and risks not identified in the baseline risk assessment, including those that may arise from specific methods of construction employed by the Contractor, and shall make due allowance in their tendered rates and prices for all costs related to complying with the provisions of the Act and Construction Regulations.

This information is given in good faith for the guidance of Tenderers, and no additional payment shall be made as a result of any inaccuracies, discrepancies or omissions contained therein.

The following aspects of this project carry the risk of possible injuries:

- Structure falling during assembly.
- Covid 19 infections.
- Working at heights.
- Operation and maintenance on the site of heavy plant such as excavators, overhead crane, bulldozers, front end loaders, tippers, TLBs, compaction equipment, rock breaking plant, water pumps, concrete mixers, ready mixed concrete trucks, batch plants, concrete pumps, compressors, pneumatic tools, generators, etc.
- Use on the site of power tools and hand tools.
- Handling of materials such as scaffolding, formwork, timber planks, steel wire, reinforcement, cement bags, concrete materials and hand stone.


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- Storage and handling of flammable materials such as fuels, oils, adhesives, and painting and cleaning products.
- Storage and handling of herbicides and ant poisons.
- Risks related to general safety and security on site.
- Electrocutation during commissioning.

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

D2. DEFINITIONS

For the purpose of this contract the following shall apply:

- (a) **“Employer”** where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract 2015 and it shall have the exact same meaning as **“client”** as defined in the Construction Regulations 2014. **“Employer”** and **“client”** are therefore interchangeable and shall be read in the context of the relevant document.
- (b) **“Contractor”** wherever used in the contract documents and in this specification, shall have the same meaning as **“Contractor”** as defined in the General Conditions of Contract 2015.

In this specification the terms **“principal contractor”** and **“contractor”** are replaced with **“Contractor”** and **“subcontractor”** respectively.

For the purpose of this contract the **Contractor** will, in terms of OHSA 1993, be the mandatary, without derogating from his status as an employer in his own right.

- (c) **“Employer’s Agent”** where used in this specification, means the Employer’s Agent as defined in the General Conditions of Contract 2015. In terms of the Construction Regulations the Employer’s Agent may act as agent on behalf of the Employer (the client as defined in the Construction Regulations).

D3. TENDERS

This Health and Safety Specification forms an integral part of the Contract and Tenderers are required to use it during the tender phase for pricing the preparation of a project specific Health and Safety Plan prior to commencing any work and for pricing the costs of ensuring compliance thereto during construction. Tenderers must forward a copy of this Specification to all other persons or organisations that may be submitting prices to the Tenderer during the tender stage to enable them to include the cost of preparing their own Health and Safety Plan, relevant to their particular operation, and for compliance with the health and safety requirements during construction. Payment items are included in the Schedule of Quantities for compliance with the Occupational Health and Safety Act and Construction Regulations and with this Specification.

Tenderers are required to complete the Contractor’s Health and Safety Declaration’ in section T2.2 ‘Returnable Schedules’.

Failure to submit the foregoing with his tender and/or to provide realistic rates for relevant payment items will lead to the conclusion that the Contractor will not be able to carry out the work under the contract safely and in accordance with the Act and Construction Regulations.

D4. NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

Where the contract meets the requirements of Construction Regulation 4, the Contractor shall, before commencement of the work and in accordance with the requirements of Regulation 4, notify the Provincial Director of the Department of Labour of the intention to carry out the construction work, using the pro forma form included as Annexure 2 to this Health and Safety Specification.


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A copy of the notification form must be kept on site, available for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representative trade unions and any other persons on the site. A copy of the notification form shall also be kept on the health and safety file, and a further copy shall be forwarded to the Employer for his records.

D5. HEALTH AND SAFETY PLAN

Before commencement of any construction work, the Contractor shall prepare a project specific Health and Safety Plan complying with the requirements of Construction Regulation 7(1)(a) and this Health and Safety Specification.

The Health and Safety Plan must include a risk assessment performed and recorded in writing by a competent person as required in terms of Construction Regulation 9. The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards identified.

The Health and Safety Plan shall be available on site for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representative trade unions, and health and safety representatives and committee members, and must be monitored and reviewed periodically by the Contractor.

D6. APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

D6.1 Appointments

The Contractor shall appoint in writing all employees.

The Contractor shall appoint in writing all subcontractors, and such appointments shall be in compliance with the requirements of Construction Regulation 7.

D6.2 Health and safety induction training

No person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site.

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo health and safety induction training by a competent person before commencement of construction work in compliance with Construction Regulations 7(5) and 9(3) and (4).

The Contractor shall ensure that all visitors to the construction site undergo health and safety induction and are provided with the necessary personal protective equipment in compliance with Construction Regulation 7(6).

D6.3 Medical certificate of fitness

The Contractor shall ensure that every employee, including subcontractors and their employees, has a valid medical certificate of fitness issued in compliance with Construction Regulation 7(1)(g) or 7(8) as applicable.

D7. APPOINTMENT OF SAFETY PERSONNEL

D7.1 Construction manager

Refer to Construction Regulation 8(1), (2), (3) and (4).

The Contractor shall appoint a full-time **construction manager** with the duty of managing all the

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construction work on the site, including the duty of ensuring occupational health and safety compliance.

The Contractor may also have to appoint one or more **assistant construction managers** to assist the construction manager where justified by the scope and complexity of the works.

D7.2 Construction health and safety officer

Refer to Construction Regulation 8(5) and (6).

Taking into consideration the size of the project and the dangers, hazards or risks that can be expected, the Contractor shall appoint in writing a full-time or part-time **construction health and safety officer** to assist in the control of all health and safety related aspects on the site. The construction health and safety officer shall be registered as required by the Chief Inspector of the Department of Labour and shall have the necessary competence and resources to perform his/her duties diligently.

D7.3 Construction supervisor

Refer to Construction Regulation 8(7), (8), (9) and (10).

The Contractor shall appoint a **construction supervisor** responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

The Contractor may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

D7.4 Health and safety representatives

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

The number of health and safety representatives for a workplace shall be at least one for every 50 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery, etc. on a regular basis, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

D7.5 Health and safety committee

In terms of **Section 19 of the Act (OHSA 1993)**, the Contractor (as employer) shall establish one or more **health and safety committee(s)** where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

D7.6 Competent persons

The Contractor shall appoint in writing designated competent employees and/or other competent

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persons as required by the Act and Regulations. Such appointments shall be in accordance with the relevant applicable sections of the Act and Regulations as determined by the requirements of the contract.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work in all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities for compliance with all requirements of the Construction Regulations.

D8. RECORDS AND REGISTERS

The Contractor is bound to keep records and registers related to health and safety on site as required by the relevant applicable sections of the Act and Regulations as determined by the requirements of the contract. Such records and registers shall be available for periodic inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees and representative trade unions.

D9. CONTRACTOR'S RESPONSIBILITIES

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

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) in terms of C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993', to confirm his status as mandatary (employer) for the contract under consideration.

The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.

D10. MEASUREMENT AND PAYMENT

It is a condition of this contract that contractors who submit tenders for this contract shall make provision in their various tendered rates and prices for all costs related to the health and safety measures required in terms of the Act and Regulations during the construction process.

(a) Safety appointments

No separate additional payment will be made to cover the costs related to persons appointed as required in terms of the Act and Regulations to fulfil the various health and safety functions. Such persons include the construction manager, any assistant construction managers, the construction health and safety officer, the construction supervisor, any assistant construction supervisors, health and safety representatives, health and safety committee members and competent persons, all as referred to in subclauses D7.1 to D7.6 above.

The Contractor shall therefore make provision in the various tendered rates and prices for all costs related to such persons.

(b) Records and registers

The keeping of records and registers related to health and safety on site as described in clause E8 above shall be regarded as a normal duty of the Contractor for which payment shall be deemed to be included in the Contractor's various tendered rates and prices, and for which no separate


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additional payment will be made except to the extent provided in item B13.02 of the Schedule of Quantities.

(c) Medical certificates

No separate additional payment will be made to cover the costs related to obtaining the medical certificates of fitness required for every employee, including subcontractors and their employees, issued in compliance with Construction Regulation 7(1)(g) or 7(8) as applicable. The Contractor Shall therefore make provision in the various tendered rates and prices for all costs related to such medical certificates.


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C3.3 PARTICULAR SPECIFICATIONS

PART E: SMALL CONTRACTOR DEVELOPMENT

E1001 SCOPE

This section covers construction aspects relating to the processes by which the construction industry develops emerging small contractors.

E1002 DEFINITIONS AND APPLICABLE LEGISLATION

(a) Definitions

Unless inconsistent with the context, in these specifications the following terms, words or expressions shall have the meanings hereby assigned to them:

Contract Participation

Contract Participation in terms of this contract is a process by which the Employer implements Government's objectives by setting a target relating to small contractor development which the Contractor shall achieve as a minimum.

Contract Participation Goal (CPG)

Contract Participation Goal is the monetary value of the target set by the Employer in the Contract Participation process.

Contract Participation Performance (CPP)

Contract Participation Performance is the measure of the contractor's progress in achieving CPG.

Targeted Enterprise

A Targeted Enterprise is any company engaged by the Contractor as a subcontractor and which is registered with the Construction Industry Development Board (CIDB) in a grading ranging from 1EP to 3EP and which is registered by the CIDB as a Potentially Emerging (PE).

(b) Applicable Legislation

The following Acts, as amended from time to time, are predominant amongst those which apply to the construction industry and are listed here for reference purposes only:

- The Constitution of South Africa;
- Public Finance Management Act No.1 of 1999;
- Preferential Procurement Policy Framework Act No. 5 of 2000;
- Construction Industry Development Board Act No. 38 of 2000;
- Broad-Based Black Economic Empowerment Act No.5 of 2003.

E1002 CONTRACT PARTICIPATION

(a) Objective

Government's objective for this contract in terms of broad-based black economic empowerment initiatives is to develop emerging small contractors that qualify as Targeted Enterprises as defined above.

(b) Contract Participation Targets

Contract participation is the process by which the Employer implements Government's objectives.


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The Employer sets a target for construction by specified entities, the rand value of which is based on the services and work undertaken by the specified entities and measured as a percentage of the Contractor's final certified value of work completed (excluding VAT) measured at the date of issue of the Certificate of completion. The contractor is obliged to commit to or exceed the target stated in section C1.2.2 Contract data, Part A: Data provided by the Employer.

(c) Contract Participation Goal (CPG)

The CPG is the monetary value of the target set by the Employer and will be calculated as follows:

CPG = final contract value (excluding VAT) x (target % set by the Employer for Targeted Enterprises).

The final contract value is the total value of certified work measured at the date of issue of the Certificate of Completion.

(d) Contract Participation Performance (CPP)

The CPP is the monetary value of the Contractor's actual progress toward achievement of the CPG calculated as follows:

CPP = total value (excluding VAT) of contribution by Targeted Enterprises

The Contractor's Contract Participation Performance will be measured monthly in order to monitor the extent to which he is striving to reach the CPG. The basis of monitoring shall be the levels of the individual contributions for Targeted Enterprises. Monthly returns, in a format approved by the Employer, are required from the Contractor and shall be submitted with each interim payment certificate.

To assist in the measurement of CPP, the Contractor shall include in his contract programme details of how he will achieve CPG. The detail shall be provided not later than one month after the Employer's Agent has accepted the original construction programme and shall be updated with every subsequent revision of the programme.

In the event that the Contractor fails to achieve the Contract Participation Goal (CPG) and fails to provide reasons which may be acceptable to the Employer, the Contractor shall be liable for a penalty as prescribed in classes SCC 4.1.1 of section C1.2.1.2 Special Conditions of Contract. The penalty shall be calculated as follows:

Penalty = 10% of the monetary value by which the achieved monetary value (CPP) falls short of the target monetary value (CPG)

= 10% of (CPG – CPP)

The penalty shall be applied on a pro rata basis according to a monthly evaluation of achievements against the programmed utilisation.

(e) Accredited Registration

CPP for Targeted Enterprises shall only be accepted if the respective Targeted Enterprises for which services or work is being claimed as having been performed are registered with the CIDB in one of the defined categories. In addition, documentary evidence that such Targeted Enterprise are registered with the South African Revenue Services (SARS) shall be lodged with the Employer's Agent before the work or service may be considered as having been performed by a Target Enterprise. The responsibility for producing evidence of such registration documentation shall rest with the Contractor.

(f) Record Keeping

The Contractor shall assume responsibility for the compilation and maintenance of comprehensive records


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detailing each Targeted Enterprise's progress during construction, starting from the award of a subcontract to a Target Enterprise until the successful completion of the subcontract work or termination of the subcontract.


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C4: SITE INFORMATION

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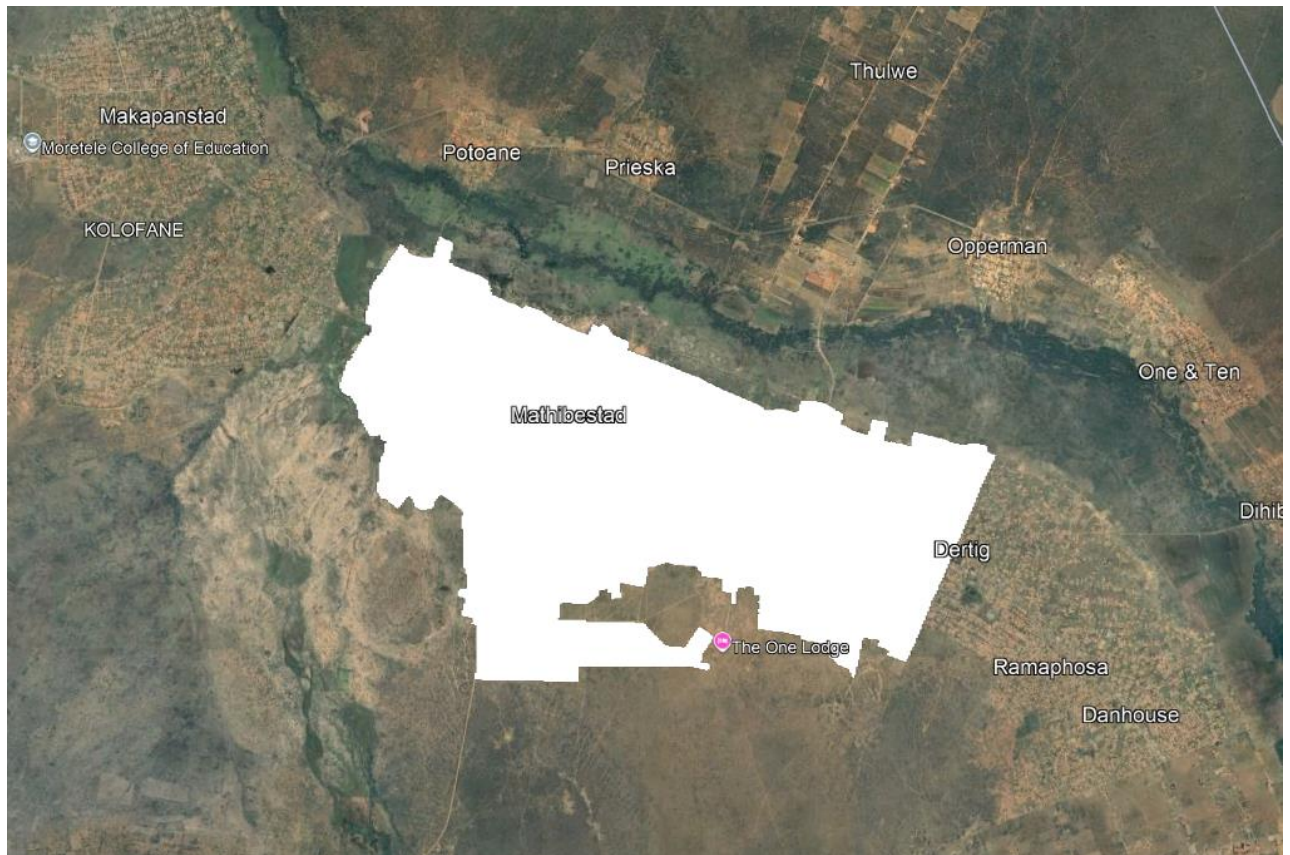
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C4.1 LOCALITY PLAN

The Township in question is located under Moretele Municipality which falls within the jurisdiction of Bojanala Platinum District Municipality, in the North West Province. The locality plan of the Township is illustrated below. For reference purposes, the Townships will be referred to as Mathibestad.



Demographics information

Mathibestad is located in Moretele local municipality, within the province of North West. (GPS coordinates: 25.2778 S, 28.1801 E).

Mathibestad

Mathibestad
Main Place 660045 from Census 2011
Area: 24.02 km²
Population: 25,945 (1,079.95 per km²)
Households: 7,202 (299.78 per km²)

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C4.2 EXAMPLE OF CONTRACT SIGNBOARD DETAILS

A project notice board, constructed in accordance with the details provided, is to be provided by the Contractor as part of the contract and erected in the position indicated by the Employer's Agent on site. The wording shall be approved prior to signwriting. The board shall remain in place until the end of the defects liability period at which time it shall be removed by the Contractor.

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