

BA-PHALABORWA LOCAL MUNICIPALITY



BID DOCUMENT

TENDER NUMBER: 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

CIDB GRADING: 3EP OR HIGHER

Closing date: 31st March 2021

Closing Time: 10H00

PREPARED BY:	PREPARED FOR:
INFRA PROJECTS AFRICA Unit 2 Suid Park 126B Suid Street POLOKWANE 0699 Tell: (015) 291 2040 Fax: (086) 293 2370 Email: admin@infraprojectsafrika.com	THE MUNICIPAL MANAGER BA-PHALABORWA LOCAL MUNICIPALITY PRIVATE BAG X 01020 PHALABORWA 1390 Tel: (015) 780 6308 Fax: (015) 780 6421

NAME OF BIDDER (BIDDING ENTITY) :

.....

BIDDER ADDRESS :

.....

TEL NUMBER :

.....

FAX NUMBER :

.....

BID AMOUNT INCLUDING VAT :

.....

BBBEE STATUS :

.....

CSD REGISTRATION No. (MAAA) :

.....

CRS (CIDB) No. :

.....

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

CONTENTS

THE TENDER

Part T1: Tendering Procedures

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THE CONTRACT

Part C1: Agreements and Contract Data

C1.1	Form of Offer and Acceptance	White
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C1.3	Form of Guarantee	White
C1.4	Form of Agreement in Terms of Mine Health and Safety Act.	White
C1.5	Appointment in Terms of Section 3(1) of Mine Health and Safety Act.	White
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Part C2: Pricing Data

C2.1	Pricing Instructions	Yellow
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Part C3: Scope of Work

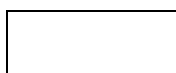
C3.1	Scope of Work	Blue
C3.2	EPWP Ministerial Determination	Blue

Part C4: Site Information

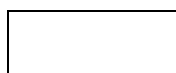
C4	Site Information	Green
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Part C5: Book of Drawings

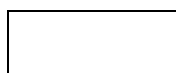
White



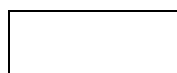
Contractor



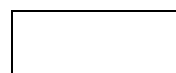
Witness 1



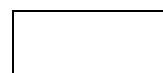
Witness 2



Employer



Witness 1



Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

T1.1 TENDER NOTICE AND INVITATION TO TENDER

VERY IMPORTANT NOTICE ON DISQUALIFICATIONS:

A bid not complying with the peremptory requirements stated hereunder will be regarded as not being an “Acceptable bid”, and as such will be rejected.

The municipality shall adjudicate and award tenders in accordance with the Preferential Procurement Policy Framework Act 5/2000 and revised Preferential Procurement Regulation June 2011 on 100 points functionality and on a 80/20 points system, where 80 points are for the price and 20 points for B-BBEE according to the said legislation. Tenders are required to submit valid B-BBEE status level verification certificates.

1. Latest Proof of registration on the National Treasury Supply Database (CSD) should be attached with a valid reference number.
2. Documents downloaded from the e-tender platform to be printed on coloured paper as per the colour coding specified on the contents page.
3. If any pages have been removed from the bid document, and have therefore not been submitted, or a copy of the original bid document has been submitted.
4. Scratching out without initialling next to the amended rates or information, writing over or painting out rates affecting the evaluation of the bid.
5. Not initialling all the pages including the cover page.
6. The use of correction fluid (i.e. tippex) or any erasable ink, e.g. pencil.
7. Non-attendance of mandatory/compulsory:
 - a) Site inspections or;
 - b) Information/Clarification meetings
8. The Bid has not been properly signed by a party having the authority to do so, according to the example of “Authority for Signatory”
9. No authority for signatory submitted – See example, where it is stated that a duly signed and dated original or certified copy of the company’s relevant resolution (for each specific bid) of their members or their board of directors, must be submitted.
10. Particulars required in respect of the BBBEE status compliance of the bid have not been completed, the bidder will not be disqualified but no preference points will be awarded.

T 1.1. 1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

11. The bidder attempts to influence, or has in fact influenced the evaluation and/or awarding of the contract.
12. Very Important notice Bidders must note that only information filled in at the spaces provided therefore in the bid document will be considered for evaluation purposes unless additional spaces is required and then only if the location of the additional information in the attachments is properly referred to the page number and section heading. Information supplied anywhere else will be disregarded which may lead to the rejection of the bid. The attachment or inclusion of information not specifically asked for is not desirable and lead to delay in the awarding of bids.
13. The bid has been submitted either in the wrong bid box or after the relevant closing date and time and if the envelope is not clearly marked indicating the project description and tender number.
14. Failure to provide a valid certificate of good standing issued by Compensation Fund (COID) or the Department of Labour, or a declaration by a designated employer that it complies with the Employment Equity Act 55 of 1998.
15. If any municipal rates and taxes or municipal service charges owed by the bidder or any of its directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three months.
16. If any bidder who during the last five years has failed to perform satisfactorily on a previous contract with the municipality, municipal entity or any other organ of state after written notice was given to that bidder that performance was unsatisfactory.
17. The accounting officer must ensure that irrespective of the procurement process followed, no award may be given to a person –
 - (a) who is in the service of the state, or;
 - (b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder, is a person in the service of the state; or;
 - (c) who is an advisor or consultant contracted with the municipality in respect of contract that would cause a conflict of interest.
18. A copy of valid registration with CIDB, in an appropriate contractor grading designation (Category), as required in the bid documentation (or in the case of JV, all partners in the JV must be attached.)
19. Bid offers will be rejected if the bidder or any of his directors is listed on the Register of Bid Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector.
20. Bid offers will be rejected if the bidder has abused the BPLM's Supply Chain Management System and action was taken in terms of paragraph 38 of the BPLM SCM Policy.
21. Failure to attach original or certified copy of a valid signed Joint Venture/Consortium agreement (if applicable) to the bid document.
22. Form of offer not completed and signed by the authorised signatory.
23. Failure to submit latest Audited Financial Statement.

T 1.1. 2

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Contractor

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Witness 1

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Witness 2

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Employer

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Witness 1

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Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO: 10/20/21

ELECTRIFICATION OF SELWANE TOWNSHIP

INVITATION TO TENDER

Ba-Phalaborwa Municipality hereby invites suitable professional services providers to render service), for the below listed project in the Ba-Phalaborwa Municipality of the Mopani District in Limpopo Province.

Tender documents are obtainable from Ba-Phalaborwa Municipality (civic centre) during the following times: 07:00 to 12:00 and from 13:00 to 15:30 (Monday to Friday).

Below are the significant details per project:-

TENDER NUMBER	DESCRIPTION	CIDB	COMPULSORY BRIEFING SESSION			FUNCTIONALITY	EVALUATION CRITERIA	CLOSING DATE AND TIME	CONTACT PERSON
		GRADING	DATE	VENUE	COST				
10/20/21	Electrification of Selwane (105 Units)	3EP OR higher	16/03/2021@ 11h00	Municipal Activity Hall	R 1000@ the Municipality	Company Experience (40) Financial Capacity (10) Personnel Knowledge(20) List Plant (30)	80/20	31/03/2021@12H00	Mr. CJ Lourens (015) 780 6303

A compulsory briefing session will be held on the dates and times specified above i.e. at the Activity Hall, Ba-Phalaborwa Municipality Main Office, CNR Mandela and Sealane Street.

N.B. Covid-19 principles should be adhered to i.e. Wearing of masks, social distancing and sanitising.(No bidder will be allowed if not wearing a mask)

The bids are to be deposited in the tender box of Ba-Phalaborwa Municipality Offices situated at CNR Mandela Drive & Sealane Street in Phalaborwa, by the closing date and time as above mentioned, where after they be opened in public. No late, telefaxed or Document found in any other place or proposal from service providers who have not attended the compulsory briefing session will not be considered.

Bidders should take note of the following bidding conditions:

1. Ba-Phalaborwa Municipality Supply Chain Management Policy shall apply in the evaluation and awarding of the Tender.
2. Ba-Phalaborwa Municipality does not bind itself to accept the lowest tender and reserves the right to accept the whole or part of the Tender and reserves the right not to appoint
3. The Bid validity shall be 90 (Ninety) days from the date of closure.
4. Bidders must provide proof of the following to avoid disqualification: CSD report (Printed between the date of the advert and closing date, certified ID copies of all directors, statement of municipal rates and taxes for both company and director(s) (not older than 3 months)/ letter from traditional authority not older than 3 months/ lease agreement, key personnel/ service team's experience (attach certified copies of qualifications and CV, CK/ Company registration, Valid Tax Clearance or Tax Pin, Certified copy or original valid BBB-EE certificate or sworn affidavit, proof of work experience (attach relevant appointment letters). **All relevant returnable documents are attached in tender document.**
5. The Minimum score for functionality will be 60% and bidders who score below 60% will not be evaluated further on price and BBBEE and preference point scoring system.

T 1.1. 3

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MOAKAMELA MI
MUNICIPAL MANAGER
Notice No 3/21

T 1.1. 4

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in **Annex F** of the **CIDB** Standard for Uniformity in Construction Procurement which are reproduced without amendment or alteration for the convenience of renderers' (See www.cidb.org.za).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

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

Additional conditions of Bid are:

Clause Number	Bid Data
F.1.1	<p>The Employer is: BAPHALABORWA LOCAL MUNICIPALITY PRIVATE BAG X01020 PHALABORWA 1390</p> <p>Tel: (015) 780 6300 Fax: (015) 781 0726</p>
F.1.2	<p>The Tender documents issued by the Employer comprise the following documents:</p> <p>THE TENDER</p> <p>Part T1 : Tendering Procedures</p> <p>T1.1 Tender Notice and invitation to tender</p> <p>T1.2 Tender Data</p> <p>Part T2: Returnable Documents</p> <p>T2.1 List of Returnable documents</p> <p>T2.2 Returnable schedules</p>

T1.2.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

	<p>THE CONTRACT</p> <p>Part C1: Agreements and Contract Data</p> <p>C1.1 Form of offer and acceptance</p> <p>C1.2 Contract Data</p> <p>C1.3 Performance guarantee</p> <p>C1.4 OHS</p> <p>Part C2: Pricing Data</p> <p>C2.1 Pricing Instructions</p> <p>C2.2 Bill of Quantities</p> <p>Part C3: Scope of Work</p> <p>C3 Scope of Work</p> <p>Part C4: Site Information</p> <p>C4 Site Information</p> <p>Part C5: Book of Drawings</p>	
F1.3	<p>Interpretation</p> <p>The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these tender conditions.</p>	
F.1.4	<p>The Employer's Agent is:</p>	
	<p>Infra Projects Africa Tel: 015 291 2040</p>	<p>126B Suid Street Polokwane ,0699</p>
F.1.5.1	<p>Reject or accept</p> <p>The Employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such a cancellation and rejection, but will give written reasons for such action upon written request to do so.</p>	
F.2.1	<p>Eligibility</p> <p>Only those tenderers who satisfy the following criteria are eligible to submit tenders:</p>	
F.2.1	<p>Only those Tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a Contractor grading designation equal to or higher than a Contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a 3EP or higher class construction work, are eligible to have their tenders evaluated.</p> <p>Joint Ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> 1. every member of the joint venture is registered with the CIDB; 2. the lead partner has a Contractor grading designation in the 3EP or higher class of construction work; and 3. the combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 3EP or higher class of construction work or a value determined in accordance with Regulation 25 (1B) of 25 (7A) of the Construction Industry Development Regulations. <p>Only those tenderers who have in their employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for supervisory and management staff are eligible to submit tenders.</p>	
F.2.2	<p>Compensation of tendering</p> <p>Accept that the Employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.</p>	

T1.2.2

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.2.3	Check documents Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.
F.2.4	Confidentiality and copyright Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.
F.2.5	Reference documents Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.
F2.6	Acknowledge Addenda Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension of the closing time stated in the tender data, in order to take the addenda into account.
F.2.7	The arrangements for a compulsory site meeting are:
	Date: 16TH March 2021 Starting time: 10:00
	Location: Ba-Phalaborwa Municipality (Municipal Activity Hall),
F.2.10	Pricing the tender State the rates and prices in Rand.
F.2.11	Alterations to documents Not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.
F.2.12	Alternative tender offers Alternative offers may be submitted only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes. Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.
F2.13.3	Tender offer communicated on paper shall be submitted as an original.
F.2.13.5	The Employer's address for delivery of Tender offers and identification details to be shown on each Tender offer package are:
	TENDER NUMBER: 10/20/21 - ELECTRIFICATION OF SELWANE VILLAGE (105 UNITS)
	Closing date and time: Closing date: 31st March 2021 Closing Time: 10h00
	Location of Tender box: Ba-Phalaborwa Local Municipality, Civic Centre, Cnr Mandela Drive & Sealene Street.
	Physical address: Ba-Phalaborwa Local Municipality, Civic Centre, Cnr Mandela Drive & Sealene Street., Phalaborwa.
F.2.13.9	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F.2.14	Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.
F2.15	The closing time for submission of tender offers is as mentioned in F.2.13.5 above and as stated in the Tender Notice and Invitation to Tender.
F.2.16	The Tender offer validity period is 90 Days .

T1.2.3

[Signature Box]

Contractor

[Signature Box]

Witness 1

[Signature Box]

Witness 2

[Signature Box]

Employer

[Signature Box]

Witness 1

[Signature Box]

Witness 2

F.2.18	The tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the Labour Intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.
F2.20	The tenderer is required to submit a Performance Guarantee from an approved insurer within 28 days from appointment. A format is included in Part C1.3 of this document. The tenderer is to submit to the employer before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.
F.2.23	The tenderer is required to submit with his tender: (1) CSD Registration Documents. In case of Joint Venture – both companies / cc to submit registration documentation. (3) In case of Joint Venture – the Joint Venture Agreement.
F.3.4	The time and location for opening of the Tender offers are: Closing date: 31st March 2021 Closing Time: 10h00 Location: Ba-Phalaborwa Local Municipality, Civic Centre, Cnr Mandela Drive & Sealene Street., Phalaborwa.

T1.2.4

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

F.3.5	<p>Evaluation Criteria</p> <p>Service Provider Prerequisites/Requirements</p> <ul style="list-style-type: none"> • All bidders must attend compulsory briefing session. • Documents downloaded from the e-tender platform to be printed as per the colour coding highlighted on the table of contents. • The 80/20 evaluation criteria will be used to evaluate the tenders (where 80 will be price and 20 BBBEE). • Bidders must attach signed declaration of interest forms (MBD 4&8). • Company registration certificate. • Original tax clearance certificate/letter from SARS with a valid pin code. • BBBEE certificate (optional)/in case of a joint venture consolidated BBBEE certificate must be submitted. • Grade 3EP or Higher/in case of a Joint Venture a consolidated grading certificate must be submitted. • Registration of electrical contractor. • Bank ratings/in case of Joint Venture the lead partner must submit. • COIDA-Certification in case of Joint Venture both companies must submit. • Power of attorney/letter of authority for signatory if applicable. • Joint venture agreements where applicable. • Forms of offer and acceptance must be fully signed and initialled in case of Joint Venture both representatives must fully initial and sign the forms of offer and acceptance. • Schedule of Proposed Key Personnel and detailed Curricula Vitae of all Key Personnel. • Certified ID copies of the directors/members/proprietors not older than three months in case of the Joint Venture, both company's directors/members/proprietors must submit the above. • Declaration on State of Municipal Accounts and copy of current Municipal Account in the name of the Tenderer or alternatively in the names of the Directors/Partners of the tendering entity. • Statement of Municipality Accounts as proof of residential address. If leasing, provide the lease agreement and the owner Municipal Account or the proof of residential address by the traditional authority in case of a non-rateable area for the business and all company directors (not older than 3 months). • Terms of reference fully completed and each page to be initialled. • Latest registration report of Central Supplier Database (with valid reference number. (Printed between the Tender opening and closing date.)) • Proof of work experience: Attach appointment letters and/or Work orders (No referral letter)
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T1.2.5

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

F3.11	<p>Evaluation of Tenders</p> <p>The Tenderers notice is drawn to the fact that the awarding of this tender will be in terms of the Supply Chain Management Policy of the Ba-Phalaborwa Local Municipality and The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement which are reproduced without amendment or alteration for the convenience of renderers' (www.cidb.org.za).</p> <p>EVALUATION OF TENDERS ON FUNCTIONALITY</p>																								
BIDDER EVALUATION CRITERIA FOR FUNCTIONALITY																									
<p>Company Experience: NB: The tender must submit five (5) similar and successfully completed projects with a minimum value of R1 000 000.00 per project.</p> <p>Note 1: references provided, to be contactable to confirm the value and the completion certificates provided.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No</th> <th style="width: 65%;">SCORING CRITERIA</th> <th style="width: 10%;">WEIGHT</th> <th style="width: 20%;">SCORE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Tender scores zero (0) points where no information regarding the company's relevant past experience indicated</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td style="text-align: center;">2</td> <td>1-2 completed projects (i.e. Appointment letters and Completion letters)</td> <td style="text-align: center;">10</td> <td></td> </tr> <tr> <td style="text-align: center;">3</td> <td>3-4 completed projects (i.e. appointment letters and completion letters is submitted.</td> <td style="text-align: center;">20</td> <td></td> </tr> <tr> <td style="text-align: center;">4</td> <td>5+ more completed projects (i. e appointment letters and completion letters.</td> <td style="text-align: center;">40</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">TOTAL</td> <td style="text-align: center;">40</td> <td></td> </tr> </tbody> </table>	No	SCORING CRITERIA	WEIGHT	SCORE	1	Tender scores zero (0) points where no information regarding the company's relevant past experience indicated	0		2	1-2 completed projects (i.e. Appointment letters and Completion letters)	10		3	3-4 completed projects (i.e. appointment letters and completion letters is submitted.	20		4	5+ more completed projects (i. e appointment letters and completion letters.	40		TOTAL		40	
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<p>Specific Personnel Knowledge</p> <p>– certified copies of Academic qualification certificates needs to be attached for functionality points scoring otherwise no points will be allocated</p> <p>Site Agent – Organogram must be attached also.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Designation</th> <th style="width: 80%;">Designation</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; vertical-align: middle;">Site Agent</td> <td> <p>Site Agent:</p> <p>Points: 8</p> <p>0: No formal Education</p> <p>2: certificate N6 Electrical Engineering</p> <p>4: N. Dip: Electrical Engineering with less than 5 years' exp.</p> <p>6: N. Dip: Electrical Engineering with more than 5 years' exp.</p> <p>8 N. Dip: Electrical Engineering with ECSA reg no. : Electrical with more than 5yrs exp.</p> </td> </tr> <tr> <td style="text-align: center; vertical-align: middle;">Construction Supervisor</td> <td> <p>Site Forman:</p> <p>Points: 4</p> <p>0: No formal qualification</p> <p>2: Certificate N6 Electrical Engineering</p> <p>4: National Diploma Electrical Engineering with more than 5 years exp.</p> </td> </tr> <tr> <td style="text-align: center; vertical-align: middle;">Construction Supervisor</td> <td> <p>Safety Officer:</p> <p>Points: 3</p> <p>0: No formal qualification</p> <p>3: Relevant qualifications with less than 5 years exp.</p> </td> </tr> </tbody> </table>	Designation	Designation	Site Agent	<p>Site Agent:</p> <p>Points: 8</p> <p>0: No formal Education</p> <p>2: certificate N6 Electrical Engineering</p> <p>4: N. Dip: Electrical Engineering with less than 5 years' exp.</p> <p>6: N. Dip: Electrical Engineering with more than 5 years' exp.</p> <p>8 N. Dip: Electrical Engineering with ECSA reg no. : Electrical with more than 5yrs exp.</p>	Construction Supervisor	<p>Site Forman:</p> <p>Points: 4</p> <p>0: No formal qualification</p> <p>2: Certificate N6 Electrical Engineering</p> <p>4: National Diploma Electrical Engineering with more than 5 years exp.</p>	Construction Supervisor	<p>Safety Officer:</p> <p>Points: 3</p> <p>0: No formal qualification</p> <p>3: Relevant qualifications with less than 5 years exp.</p>																
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T1.2.6

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

		LIC Supervisor	<p><u>NQF Level 2(grade 10):</u></p> <p><u>Points: 2</u></p> <p>2: Proof qualification must be attached.</p>																					
		LIC Supervisor	<p><u>NQF Level 4 (grade 12):</u></p> <p><u>Points: 3</u></p> <p>3: Proof qualification must be attached.</p>																					
	<p>List of plant-</p> <p>1. Tenderer to submit proof of ownership.</p> <p>2. And in case of hiring, a letter of intent must be submitted with proof of ownership.</p> <p>Bidders will scores half points where the total minimum plant required has a letter of intent and also proof of ownership by a rental company.</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 60%;">Required Plant</th> <th style="width: 15%;">Weighting</th> <th style="width: 25%;">Score</th> </tr> </thead> <tbody> <tr> <td>1 x Crane Truck</td> <td>10</td> <td></td> </tr> <tr> <td>1 x Cherry Picker Truck</td> <td>10</td> <td></td> </tr> <tr> <td>1 x LDV</td> <td>5</td> <td></td> </tr> <tr> <td>Compressor and Jackhammer</td> <td>5</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>TOTAL</td> <td>30</td> <td></td> </tr> </tbody> </table>		Required Plant	Weighting	Score	1 x Crane Truck	10		1 x Cherry Picker Truck	10		1 x LDV	5		Compressor and Jackhammer	5					TOTAL	30	
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Compressor and Jackhammer	5																							
TOTAL	30																							
	Functionality Threshold(Minimum score)																							
	Total Points for Functionality																							
	<p>#note: Bidders that obtain a minimum of 60% will be evaluated further using the pricing and BEEE certificate as per supply chain management.</p>																							
F.3.11.2	<p>The procedure for the evaluation of responsive tenders is Method 2.</p> <p>The financial offer will be scoring using Formula 2 (option 1) in Table F1 where the value of W1 is:</p> <p>1) 90 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of R 50 000 000; or</p> <p>2) 80 where the financial value inclusive of VAT of one or more responsive tender offers have a value that equals to or is less than R 50 000 000.</p> <p>Up to 100 minus W1 tender evaluation points will be awarded to tenderers who complete the preference schedule and who are found to be eligible for the preference claimed.</p>																							
F.3.18	<p>The number of paper copies of the signed contract to be provided by the Employer is one.</p> <p>The additional conditions of Tender are:</p> <p>1 Ba-Phalaborwa Local Municipality may also request that the Tenderer provide written evidence that his financial, labour and resources are adequate for carrying out the project.</p> <p>2 The Ba-Phalaborwa Local Municipality reserves the right to appoint a firm of chartered accountants and auditors and / or execute any other financial investigations on the financial resources of any Tenderer. The Tenderer shall provide all reasonable assistance in such investigations.</p> <p>3 The Ba-Phalaborwa Local Municipality reserves the right to appoint a different Contractor for each project. The Tenderer shall be required to complete the form of offer (C1.1) and the Bill of Quantities (C2.2) for each project.</p> <p>4 The bid document shall be submitted as a whole and shall not be taken apart.</p> <p>5 List of returnable documents (PART T2) must be completed in full. (A bidder's company profile will not be used by BPLM to complete PART T2 on behalf of the bidder)</p> <p>NB: If PART T2 is not completed in full by the bidder, this offer will be rejected</p>																							

T1.2.7

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Annex F
(Normative)
Standard Conditions of Tender

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

F.1 General

F.1.1 Actions

The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently.

F.1.2 Tender Documents

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

F.1.3 Interpretation

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

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

F.1.3.3 For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

a) comparative offer means the tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other tendered parameters that will affect the value of the financial offer have been taken into consideration

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

c) fraudulent practice means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels quality (functionality) means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

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

F.1.5 The employer's right to accept or reject any tender offer

F.1.5.1 The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and

T1.2.8

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

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

F.2 Tenderer's obligations

F.2.1 Eligibility

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

F.2.2 Cost of tendering

Accept that the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

F.2.3 Check documents

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

F.2.4 Confidentiality and copyright of documents

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

F.2.5 Reference documents

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

F.2.6 Acknowledge addenda

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

F.2.7 Clarification meeting

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

F.2.8 Seek clarification

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

F.2.9 Insurance

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

F.2.10 Pricing the tender offer

T1.2.9

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

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

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

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

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

F.2.11 Alterations to documents

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

F.2.12 Alternative tender offers

F.2.12.1 Submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.

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

F.2.13 Submitting a tender offer

F.2.13.1 Submit a tender offer to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

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

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

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data.

The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

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

F.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and

T1.2.10

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contact address.

F.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

F.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

F.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

F.2.15 Closing time

F.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the tender data.

F.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

F.2.16 Tender offer validity

F.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

F.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period.

F.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (Or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

F.2.18 Provide other material

F.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

F.2.20 Submit securities, bonds, policies, etc.

T1.2.11

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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

F.2.21 Check final draft

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

F.2.22 Return of other tender documents

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

F.2.23 Certificates

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

F.3 The employer's undertakings

F.3.1 Respond to clarification

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

F.3.2 Issue Addenda

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

F.3.3 Return late tender offers

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

F.3.4 Opening of tender submissions

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

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

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

F.3.5 Two-envelope system

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

F.3.5.2 Evaluate the quality of the technical proposals offered by tenderers, then advice tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the quality evaluation more than the minimum number of points for quality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any preferences claimed. Return unopened financial proposals to

T1.2.12

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

tenderers whose technical proposals failed to achieve the minimum number of points for quality.

F.3.6 Nondisclosure

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

F.3.7 Grounds for rejection and disqualification

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

F.3.8 Test for responsiveness

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

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

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

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

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

F.3.9 Arithmetical errors

F.3.9.1 Check responsive tender offers for arithmetical errors, correcting them in the following manner:

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

T1.2.13

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

F.3.9.2 Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of his arithmetical errors in the manner described in F.3.9.1.

F.3.10 Clarification of a tender offer

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

F.3.11 Evaluation of tender offers

F.3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate it using the tender evaluation method that is indicated in the Tender Data and described below:

Method 1 : Financial offer	1) Rank tender offers from the most favourable to the least favourable comparative offer. 2) Recommend highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 2 : Financial offer and preferences	1) Score tender evaluation points for financial offer. 2) Confirm that tenderers are eligible for the preferences claimed and if so, score tender evaluation points for referencing. 3) Calculate total tender evaluation points. 4) Rank tender offers from the highest number of tender evaluation points to the lowest. [5) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 3 : Financial offer and quality	1) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender data. 2) Score tender evaluation points for financial offer. 3) Calculate total tender evaluation points. 4) Rank tender offers from the highest number of tender evaluation points to the lowest. 5) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 4 : Financial offer, quality and preferences	1) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender data. 2) Score tender evaluation points for financial offer. 3) Confirm that tenderers are eligible for the preferences claimed, and if so, score tender evaluation points for referencing. 4) Calculate total tender evaluation points. 5) Rank tender offers from the highest number of tender evaluation points to the lowest. 6) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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

F.3.11.2 Scoring Financial Offers

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

N_{FO}	= $W_1 \times A$ where:
N_{FO}	= the number of tender evaluation points awarded for the financial offer.
W_1	= the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.
A	= a number calculated using either formulas 1 or 2 below as stated in the Tender Data.

T1.2.14

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

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

where:

P_m = the comparative offer of the most favourable tender offer.

P = the comparative offer of tender offer under consideration.

F.3.11.3 Scoring for B-BBEE

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	8	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

F.3.12 Insurance provided by the employer

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

F.3.13 Acceptance of tender offer

F.3.13.1 Accept tender offer only if the tenderer complies with the legal requirements stated in the Tender Data.

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

F.3.14 Notice to unsuccessful tenderers

After the successful tenderer has acknowledged the employer's notice Of acceptance, notify other tenderers that their tender offers have not been accepted.

T1.2.15

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

F.3.15. Prepare contract documents

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

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents,
- c) other revisions agreed between the employer and the successful tenderer, and
- d) the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Issue final contract

Prepare and issue the final draft of contract documents to the successful tenderer for acceptance as soon as possible after the date of the employer's signing of the form of Offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of tender require the tenderer to submit, after acceptance by the employer, shall be included.

F.3.17 Complete adjudicator's contract

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

F.3.18 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

T1.2.16

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

T2.1 LIST OF RETURNABLE DOCUMENTS
--

The Tenderer must complete the following returnable Schedules:

Returnable Schedules required for Tender evaluation purposes

Form A	Compulsory Enterprise Questionnaire
Form B	Invitation To Bid- MBD1
Form C	Tax Clearance Certificate-MBD2
Form D	Record of Addenda to Tender Documents
Form E	MBD 4
Form F	MBD 5
Form G	MBD 6.1 Declaration of good standing regarding tax & Original Tax Clearance Certificate
Form H	MBD 6.2
Form I	MBD 8
Form J	MBD 9
Form K	Authority for Signatory
Form L	Schedule of Previous Experience
Form M	Schedule of Current Projects
Form N	Municipal Rates and Taxes
Form O	Proposed Key Personnel
Form P	Schedule of Plant and Equipment
Form Q	Schedule of Proposed Sub-Contractors
Form S	Financial References

C1.1	Offer Portion of Form of Offer and Acceptance
C1.2	Contract Data (Part 2)
C1.3	Form of Guarantee
C1.4	Agreement in terms of the Mine Health and Safety Act.
C1.5	Appointment in Terms of Section 3(1) of the mine Health and Safety Act.
C1.6	Agreement in Terms of OHS
C1.7	Certification of Authority for Signatory to agreement in terms of OHS Act.
C2.2	Bill of Quantities

Returnable Documents that will be incorporated into the contract

T2.1.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

T2.2 RETURNABLE DOCUMENTS

RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

FORM A: COMPULSORY ENTERPRISE QUESTIONNAIRE

In the case of a Joint Venture – This questionnaire is to be completed and submitted in respect of each partner.

- 1. Name of Enterprise:**
- 2. VAT Registration number, if any:**
- 3. CIDB Registration number:**
- 4. Particulars of sole proprietors and partners in partnership:**

Name	Identity Number	Personal Income Tax Number

* Complete only if sole proprietor or partnership and attach separate page if more than 4 partners.

- 5. Particulars of companies and close corporations:**

Company Registration Number:

Close Corporation Number:

Tax reference Number:

T2.2.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

6. Record in the service of the state:

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership of director, manager, principal stakeholder or stakeholder in a company or close corporation is currently of has been within the last 12 months in the service of any of the following:

- a member of any municipal council
- a member of any provincial legislature
- a member of the National Assembly or the National Council of Province
- a member of the board of Directors of any Municipal entity
- an official of any municipality or municipal entity
- an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- a member of an accounting authority of any national or provincial public entity
- an employee of Parliament or a provincial legislature

If any of the above boxes are marked, disclose the following information:

Name of sole proprietor, partner, director, manager or principal stakeholder or stakeholder	Name of Institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within the last 12 months

Signed..... Date.....

Name..... Position.....

Tenderer.....

T2.2.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM B: INVITATION TO BID

MBD 1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE BA-PHALABORWA LOCAL MUNICIPALITY

BID NUMBER: CLOSING DATE: CLOSING TIME:
DESCRIPTION:

The successful bidder will be required to fill in and sign a written Contract Form (MBD 7).

BID DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT:

Cnr Nelson Mandela & Sealane Street
Phalaborwa
1390

Bidders should ensure that bids are delivered timeously to the correct address inside the relevant bid box. If the bid is late or not inside the correct bid box, it will not be accepted for consideration.

- (b) The bid box is generally open 24 hours a day, 7 days a week.
- (c) ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

(d) NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (as defined in Regulation 1 of the Local Government: Municipal Supply Chain Management Regulations)

T2.2.3

Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2

**THE FOLLOWING PARTICULARS MUST BE FURNISHED
(FAILURE TO DO SO MAY RESULT IN YOUR BID BEING DISQUALIFIED)**

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER CODE.....NUMBER.....

CELLPHONE NUMBER

FACSIMILE NUMBER CODENUMBER.....

E-MAIL ADDRESS

VAT REGISTRATION NUMBER

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN ATTACHED? (MBD 2) YES/NO

HAS A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE BEEN SUBMITTED? (MBD 6.1) YES/NO

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

- AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA)
- A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM (SANAS)
- A REGISTERED AUDITOR

(Tick applicable box)

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

ARE YOU THE ACCREDITED REPRESENTATIVE
IN SOUTH AFRICA FOR THE GOODS/SERVICES/WORKS OFFERED?

YES/NO
(IF YES ENCLOSE PROOF)


SIGNATURE OF BIDDER

DATE

CAPACITY UNDER WHICH THIS BID IS SIGNED

TOTAL BID PRICE..... TOTAL NUMBER OF ITEMS OFFERED.....

T2.2.4


Contractor Witness 1 Witness 2 Employer Witness 1 Witness 2

FORM C: TAX CLEARANCE CERTIFICATE

MBD 2

TAX CLEARANCE CERTIFICATE

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

- 1. In order to meet this requirement bidders are required to complete in full form TCC001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids. Copies of form TCC 001 are available from any SARS branch office nationally or on the website www.sars.gov.za.
- 2. SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3. The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4. In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.
- 6. Exemption to the provision of a Tax Clearance Certificate will be granted provided that:
 - a) The bidder is registered on the vendor database of the municipality and a valid tax clearance certificate was submitted together with the application for registration
 - b) If the closing date of the price quotation or bid falls within the expiry date of the tax clearance certificate that is in the municipality's possession.

T2.2.5

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM D: RECORD OF ADDENDA TO TENDER DOCUMENTS

➤ Was the Addendum issued? YES NO

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

	Date	Title of Details

Signed..... Date.....

Name..... Position.....

Tenderer.....

FORM E: MBD 4

DECLARATION OF INTEREST

MBD4

- 1. No bid will be accepted from persons in the service of the state¹.
- 2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favoritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.







3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid. Also select the applicable answers

- 3.1 Full Name of bidder or his or her representative:
- 3.2 Identity Number:
- 3.3 Position occupied in the Company (director, trustee, shareholder²).....
- 3.4 Company Registration Number:
- 3.5 Tax Reference Number:
- 3.6 VAT Registration Number:
- 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
- 3.8 Are you presently in the service of the state*
- 3.8.1 If yes, furnish particulars.
.....
.....

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

MBD4

T2.2.7

					
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

² Shareholder” means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company

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

3.9.1 If yes, furnish particulars

.....
.....

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

3.10.1 If yes, furnish particulars

.....
.....

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

3.11.1 If yes, furnish particulars

.....
.....

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

3.12.1 If yes, furnish particulars

.....
.....

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

3.13.1 If yes, furnish particulars

.....
.....

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

3.14.1 If yes furnish particulars:

.....
.....

MBD4

T2.2.8

<small>Contractor</small>	<small>Witness 1</small>	<small>Witness 2</small>	<small>Employer</small>	<small>Witness 1</small>	<small>Witness 2</small>

Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	Employee Number

CERTIFICATION

I, THE UNDERSIGNED

(NAME)

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

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

.....
 Signature

.....
 Date

.....
 Capacity

.....
 Name of Bidder

T2.2.9

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

FORM F: MBD 5

MBD 5

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

1 Are you by law required to prepare annual financial statements for auditing? ***YES /NO**

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years. ***YES/NO**

.....
.....

2 Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days? ***YES/NO**

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days. ***YES/NO**

2.2 If yes, provide particulars.

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

3 Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract? ***YES / NO**

3.1 If yes, furnish particulars

.....
.....

* Delete if not applicable

T2.2.10

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? ***YES/NO**

4.1 If yes, furnish particulars

.....
.....

CERTIFICATION

I, THE UNDERSIGNED (NAME) CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

T2.2.11

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM G: MBD 6.1

MBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011

This preference form must form part of all Bidders invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all bids:
- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
- 1.3 Points for this bid shall be awarded for:
- (a) Price; and
 - (b) B-BBEE Status Level of Contributor.
- 1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- a) "B-BBEE" means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- b) "B-BBEE status level of contributor" means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

T2.2.12

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- c) “bid” means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- d) “Broad-Based Black Economic Empowerment Act” means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- e) “EME” means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- f) “functionality” means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- g) “prices” includes all applicable taxes less all unconditional discounts;
- h) “proof of B-BBEE status level of contributor” means:
- 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- i) “QSE” means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- j) “rand value” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.3 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

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

80/20 **or** **90/10**

Where

- Ps = Points scored for price of bid under consideration
- Pt = Price of bid under consideration
- Pmin = Price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

- 4.1 In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference in terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

T2.2.13

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 6.1

5. BID DECLARATION

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

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

6.1 B-BBEE Status Level of Contributor: =(maximum of 10 or 20 points)
 (Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm :.....

8.2 VAT registration number :.....

8.3 Company registration number :.....

T2.2.14

<div style="border: 1px solid black; height: 25px; width: 100%;"></div>	<div style="border: 1px solid black; height: 25px; width: 100%;"></div>	<div style="border: 1px solid black; height: 25px; width: 100%;"></div>	<div style="border: 1px solid black; height: 25px; width: 100%;"></div>	<div style="border: 1px solid black; height: 25px; width: 100%;"></div>	<div style="border: 1px solid black; height: 25px; width: 100%;"></div>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MBD 6.1

8.4 TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

8.6 COMPANY CLASSIFICATION

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

[TICK APPLICABLE BOX]

8.7 MUNICIPAL INFORMATION

Municipality where business is situated.....

Registered Account Number

Stand Number

8.8 Total number of years the company/firm has been in business?

8.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

T2.2.15

.....

Contractor

.....

Witness 1

.....

Witness 2

.....

Employer

.....

Witness 1

.....

Witness 2

- (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution.

<p>WITNESSES</p> <p>1.</p> <p>2.</p>
--

<p>.....</p> <p>SIGNATURE(S) OF BIDDERS(S)</p> <p>DATE:</p> <p>ADDRESS</p> <p>.....</p> <p>.....</p>
--

--

Contractor

--

Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

FORM H: MBD 6.2

MBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT

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

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:201x.

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9.(1) and 9.(3) make provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Regulation 9.(3) prescribes that where there is no designated sector, a specific bidding condition may be included, that only locally produced services, works or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.
- 1.4. Where necessary, for bids referred to in paragraphs 1.2 and 1.3 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.5. A person awarded a contract in relation to a designated sector, may not subcontract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.6. The local content (LC) as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 201x as follows:

$$LC = 1 - \left(\frac{x}{y} \right) \times 100$$

Where

- x imported content
- y bid price excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid as required in paragraph 4.1 below.

1.7. A bid will be disqualified if:

- the bidder fails to achieve the stipulated minimum threshold for local production and content indicated in paragraph 3 below; and
- this declaration certificate is not submitted as part of the bid documentation.

T2.2.17

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 6.2

2. Definitions

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

3. The stipulated minimum threshold(s) for local production and content for this bid is/are as follows:

(a) Description of services, works or goods	Stipulated minimum threshold
--	-------------------------------------

	_____ %
	_____ %
	_____ %

4. Does any portion of the services, works or goods offered have any imported content? YES / NO

4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.6 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid.

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

T2.2.18

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MBD 6.2

Indicate the rate(s) of exchange against the appropriate currency in the table below:

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

**LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER
 LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF
 EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT
 RESPONSIBILITY
 (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)**

IN RESPECT OF BID No.

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):

.....

NB The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

I, the undersigned, (full names), do hereby declare, in my capacity as of(name of bidder entity), the following:

The facts contained herein are within my own personal knowledge.

I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286.

The local content has been calculated using the formula given in clause 3 of SATS 1286, the rates of exchange indicated in paragraph 4.1 above and the following figures:

Bid price, excluding VAT (y)	R
Imported content (x)	R
Stipulated minimum threshold for Local content (paragraph 3 above)	
Local content % as calculated in terms of SATS 1286	

If the bid is for more than one product, a schedule of the local content by product shall be attached.

T2.2.19

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

T2.2.20

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM I: MBD 8

MBD 8

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

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

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

T2.2.21

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

T2.2.22

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM J: MBD 9

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Standard Bidding Document (MBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- 4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

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

T2.2.23

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid: **CONTRACT NO. 07/20/21. – REFURBISHMENT OF NAMAKGALE STADIUM.**

(Bid Number and Description)

in response to the invitation for the bid made by:

BA-PHALABORWA LOCAL MUNICIPALITY

(Name of Institution)

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

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word “competitor” shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

T2.2.24

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 9

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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

T2.2.25

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 9

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

T2.2.26

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM K: AUTHORITY OF SIGNATORY

Notes to tenderer:

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

Details of person responsible for tender process:

Name :

Contact number :

Office address :

Signatories for close corporations and companies shall confirm their authority by attaching to this form a **duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be.

FOR COMPANIES AND CLOSE CORPORATIONS:

"By resolution of the board of directors passed on (date)"

Mr

has been duly authorized to sign all documents in connection with the Tender for Contract Numberand any Contract which may arise there from on behalf of

(BLOCK CAPTIALS)

SIGNED ON BEHALF OF THE COMPANY

IN HIS CAPACITY AS

DATE

T2.2.27

--	--	--	--	--	--

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FULL NAMES OF SIGNATORY

AS WITNESSES: 1.
 2.

FOR JOINT VENTURES:

Certificate of Authority for Joint Ventures

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

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead Partner: CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:
 CIDB Reg No:		Signature: Name: Designation:

T2.2.28

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM L: SCHEDULE OF PREVIOUS EXPERIENCE

Provide the following information on relevant previous experience (indicate specifically projects of similar or larger size and/or which is similar with regard to type of work. **This information is material to the award of the Contract.**

Description	Value (R) VAT excluded	Year(s) work executed	Reference		
			Name	Organisation	Tel no

Signed.....

Date.....

Name.....

Position.....

Tenderer.....

T2.2.29

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM M: SCHEDULE OF CURRENT PROJECTS

Provide the following information on current projects. **This information is material to the award of the Contract**

Description	Value (R) VAT excluded	Date Appointed	Reference		
			Name	Organisation	Tel no

Signed..... Date.....

Name..... Position.....

Tenderer.....

T2.2.30

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

FORM N: MUNICIPAL RATES AND TAXES

FORM H. DECLARATION WITH REGARDS TO MUNICIPAL SERVICES, RATES AND TAXES

I _____ the undersigned, declare on behalf of (Name of Bidder) _____ that; the bidder and (or) any of its director(s) does not owe any municipal services, rates and taxes to the municipality or any other municipality or municipal entity any amount which could be in arrears for an period for a period more than three months.

In the event that this declaration is found to be false, the bid will be rejected and found to be nonresponsive.

Signed..... Date.....

Name..... Position.....

Tenderer.....

N.B: TENDERER TO SUBMIT A COPY OF A MUNICIPAL ACCOUNT OF THE COMPANY AND/OR THAT OF ITS DIRECTOR NOT IN ARREARS AND NOT OLDER THAN THREE (03) MONTHS;

OR

IN THE EVENT THAT THE BIDDER IS LEASING, A LEASE AGREEMENT ALONG WITH THE SERVICES ACCOUNT OF THE LEASED PROPERTY SHOULD BE ATTACHED; OR A CONFIRMATION LETTER OR CLEARANCE FROM THE LOCAL MUNICIPALITY THAT MUNICIPAL SERVICES ARE NOT CHARGED/LEVIED.

(FAILURE TO DO SO WILL LEAD TO DISQUALIFICATION OF THE BID)

T2.2.31

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

FORM O: PROPOSED KEY PERSONNEL

Please list the personnel that you intend to appoint on this contract.

DESCRIPTION	<u>Name</u> of Full time member	Staff to be appointed on this contract	
		No of Full Time employment	No of Part Time employment
Contract Manager			
Site Agent			
Clerk			
Foreman			
Material Technician			
Surveyor			
Operators			
Supervisor			
Labourers			
Other			
2.			
3.			
4.			
5.			

➤ Organogram must be attached as per evaluation criteria.

Signed..... Date.....

Name..... Position.....

Tenderer.....

T2.2.32

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

FORM P: SCHEDULE OF PLANT AND EQUIPMENT

TYPES OF PLANT	NUMBER OF UNITS OWNED BY CONTRACTOR	NUMBER OF UNITS ALLOCATED TO THIS CONTRACT	
		OWNED	HIRED

- Proof of ownership must be attached (certified).
- If letter of intent is used proof of ownership must also be attached (certified).

Signed..... Date.....

Name..... Position.....

Tenderer.....

T2.2.33

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

FORM Q: SCHEDULE OF PROPOSED SUB-CONTRACTORS

NAME OF SUB-CONTRACTOR	FULL DESCRIPTION OF WORK TO BE PERFORMED BY SUB-CONTRACTOR

Signed.....

Date.....

Name.....

Position.....

Tenderer.....

T2.2.34

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM S: FINANCIAL REFERENCES

DETAILS OF TENDERERS BANKING INFORMATION

I/We hereby authorise the Client/Engineer to approach all or any of the following banks for the purposes of obtaining a financial reference:

BANK NAME:									
ACCOUNT NAME: <i>(e.g. ABC Civil Construction cc)</i>									
ACCOUNT TYPE: <i>(e.g. Savings, Cheque etc)</i>									
ACCOUNT NO:									
ADDRESS OF BANK:									
CONTACT PERSON:									
TEL. NO. OF BANK / CONTACT:									
BANK RATING									
How long has this account been in existence:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">0-6 months</td> <td style="width: 30px; text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">7-12 months</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">13-24 months</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">More than 24 months</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> (Tick which is appropriate)	0-6 months	<input type="checkbox"/>	7-12 months	<input type="checkbox"/>	13-24 months	<input type="checkbox"/>	More than 24 months	<input type="checkbox"/>
0-6 months	<input type="checkbox"/>								
7-12 months	<input type="checkbox"/>								
13-24 months	<input type="checkbox"/>								
More than 24 months	<input type="checkbox"/>								

Signed.....

Date.....

Name.....

Position.....

Tenderer.....

T2.2.35

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

C. THE CONTRACT

Part C1: Agreements and Contract Data

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Form of Guarantee
- C1.4 Agreement in terms of the Mine Health and Safety Act.
- C1.5 Appointment in Terms of Section 3(1) of the mine Health and Safety Act.
- C1.6 Agreement in Terms of OHS
- C1.7 Certification of Authority for Signatory to agreement in terms of OHS Act.

Part C2: Pricing Data

- C2.1 Pricing Instructions
- C2.2 Bills of quantities

Part C3: Scope of Work

- C3.1 Scope of Work
- C3.2 EPWP Ministerial Determination
- C3.3 EPWP Guideline

Part C4: Site Information

- C4 Site Information

Part C5: Book of Drawings

C1

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

C1 AGREEMENTS AND CONTRACT DATA

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Form of Guarantee
- C1.4 Agreement in terms of the Mine Health and Safety Act.
- C1.5 Appointment in Terms of Section 3(1) of the mine Health and Safety Act.
- C1.6 Agreement in Terms of OHS
- C1.7 Certification of Authority for Signatory to agreement in terms of OHS Act.

C1.1

--	--	--	--	--	--

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.1 FORM OF OFFER AND ACCEPTANCE

This document formalises the legal process of offer and acceptance. It contains:

- a) the offer to provide the engineering and construction works for a price, or in accordance with the terms of the financial proposal made;
- b) confirmation from the employer that he accepts the tender offer following his tender evaluation, and that a contract therefore exists; and
- c) a schedule of deviations, which records any, agreed changes to the documentation that may occur during the process of offer and acceptance.

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of: **CONTRACT NO. 10/20/21 – Electrification of Selwane township.**

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

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

ELECTRIFICATION OF SELWANE TOWNSHIP

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

.....

.....Rand (in words); R (In figures)

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

Signature(s)

.....

Name(s)

.....

Capacity

.....

for the tenderer

C1.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(Name and address of organization)

Name &
signature of
witness

..... Date

CIDB Registration Number

Acceptance

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

The terms of the contract, are contained in:

- Part C.1 Agreements and contract data, (which includes this agreement)
- Part C.2 Pricing data
- Part C.3 Scope of work.
- Part C.4 Site information

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

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

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Or if dispatched by courier, this Agreement comes into effect two working days after the submission by the Employer of one fully completed original copy of this document including the Schedule of Deviations (if any), to a courier-to-counter delivery / counter-to-counter delivery / door-to-counter delivery /door-to-door delivery /courier service (delete that which is not applicable), provided that the Employer notifies the Tenderer of the tracking number within 24 hours of such submission. Unless the Tenderer (now Contractor) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

C1.3

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Signature

.....

Name

.....

Capacity

.....

**for the
Employer**

.....

(Name and address of organization)

**Name &
Signature of
witness**

..... **Date**

Schedule of Deviations

1 Subject

Details

2 Subject

Details

3 Subject

Details

4 Subject

Details

5 Subject

C1.4

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Details _____

6 Subject

Details _____

7 Subject

Details _____

8 Subject

Details _____

9 Subject

Details _____

10 Subject

Details _____

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

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.2 CONTRACT DATA

PART 1: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

The Conditions of Contract are the **General Conditions of Contract for Construction Works (2015) 3rd Edition**, published by the South African Institution of Civil Engineering. Private Bag x200, Halfway House, 1685. Is applicable to this contract and is obtainable from www.saice.org.za.

The following contract specific data, referring to the General Condition of Contract for Construction Works, 3rd Edition, 2015, are applicable to this contract:.

PART 1: Data provided by the Employer

Clause	Data
1.1.1.13	The Defects Liability Period is 12 months .
1.1.1.15	The Name of the Employer is Ba-Phalaborwa Local Municipality
1.1.1.26	Pricing Strategy is fixed Contract .
1.2.1.2	The address of the Employer is: PRIVATE BAG X01020 PHALABORWA, 1390 Telephone: 015 780 6300 Facsimile: 015 780 781 0726
1.1.1.16	The name of the Employer's Agent is: Infra Projects Africa The address of the Employer's Agent is: 126B Suid Street Polokwane 0699 Telephone : 015 291 2040 Facsimile : 086 293 2370
5.3.1	The documentations required before commencement with works execution are: Healthy and Safety Plan (Ref to Clause 4.3) Initial Programme (Ref to Clause 5.6) Security/Guarantee (Ref to Clause 6.2) Insurance (Ref to Clause 8.6) And other requirements
5.3.2	The time to submit documentation required before commencement with works execution is 28 days.
5.8.1	The non-working days are Sundays and the special non-working days are official builder's holiday plus all statutory public holidays. The year-end break commences on 15 th December and the first Monday of the subsequent year.

C1.6

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

5.13.1	The penalty for failing to complete the works is R 300000.00 per day.
6.2	The Form of Guarantee is to contain the wording of the proforma document included in the General Conditions of Contract (Pro-forma included in section C1.3 to this document).
6.2	The liability of the guarantee shall be 10 % .
6.5.1.2.3	The percentage allowance to cover overhead charges is 10%
6.8.2	<p>Contract Price Adjustment: The contract shall be subject to Contract Price Adjustment.</p> <p>The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule included in the General Conditions of Contract.</p> <p>The value of "x" is 0.15</p> <p>The values of the coefficients are:</p> <p>a = 0.25 Labour b = 0.3 Contractor's equipment c = 0.35 Material d = 0.1 Fuel</p> <p>The Province wherein the larger part of the Site is located is Limpopo.</p> <p>The applicable industry for the Producer Price Index for material is Diesel</p> <p>The area for the Producer Price Index for fuel is Example Fuel index area</p> <p>The base month is March 2021.</p>
6.8.3	Price adjustments for variations in the cost of special materials are allowed.
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80 % .
6.10.3	The limit of retention money is 10 % of the contract value.
8.6.1.1.2	The value of the materials supplied by the Employer to be included in the insurance sum is nil.
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is nil.
8.6.1.3	The limit of indemnity for liability insurance is R 0.00
	The Works shall be completed within 4 Months
5.12.2.2	<p>The additional clauses to the General Conditions of Contract are:</p> <p>Extensions of time in respect of clause 42 in respect of abnormal rainfall shall be calculated using the following formula for each calendar month or part thereof:</p> $V = \frac{(Nw - Nn) + (Rw - Rn)}{X}$ <p>Where:</p> <p>V = Extension of time in calendar days in respect of the calendar month under consideration.</p> <p>Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded.</p>

C1.7

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

	<p>Nn = Average number of days in the relevant calendar month , as derived from existing rainfall records, on which a rainfall of 10mm or more has been recorded for the calendar month.</p> <p>Rw = Actual average rainfall in mm recorded for the calendar month under consideration.</p> <p>Rn = Average rainfall in mm for the calendar month as derived from existing rainfall records as stated in the Site Information.</p> <p>For purposes of the Contract Nn, Rn, X and Y shall have those values assigned to them in the South African Weather Service's rainfall records of the nearest station to the site.</p> <p>If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.</p> <p>The total extension of time shall be the algebraic sum of all monthly totals for the period under consideration, but if the total is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for part of a month shall be calculated using pro rata values of Nn and Rn.</p> <p>This formula does not take account flood damage which could cause further or concurrent delays and will be treated separately as far as extension of time is concerned.</p> <p>The factor (Nw – Nn) shall be considered to represent a fair allowance for variations from the average in the number of days during which rainfall exceeds 10 mm. The factor (Rw- Rn) shall be considered to represent a fair allowance for variations from the average in the number of days during which the rainfall did not exceed 10 mm but wet conditions prevented or disrupted work.</p> <p>For the purpose of applying the formula, accurate rain gauging shall be taken at a suitable point on the Site and the Contractor shall at his own expense, take all necessary precautions to ensure that rain gauges cannot be interfered with by unauthorized persons.</p>
5.12.2.2	<p>A delay caused by inclement weather conditions will be regarded as a delay only if, in the opinion of the Engineer, all progress on an item or items of work on the critical path of the working programme of the contractor has been brought to a halt. Delays on working days only (based on a five-day working week) will be taken into account for the extension of time, but the Contractor shall make provision in his programme of work for an expected delay of "n" working days caused by normal rainy weather, for which he will not receive any extension of time, where "n" equals days. Extension of time during working days will be granted to the degree to which actual delays, as defined above, exceed the number of "n" workings days.</p>

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Additions to Contract Data

Payment for the labour-intensive component of the works

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.

Contractor's default in payment to Labourers and Employees

Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene. The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.

Minimum Number of Workers to be employed

The Contractor shall employ a minimum number of 14 **unskilled workers**, failure to which the Employer may take such steps to source these workers and incorporate them into the Contractor's workforce without any financial adjustment of the Contract. Should the Contractor continually and deliberately fail to adhere to this provision without the express written consent of the Employer, the Employer shall have the right to take over the project and terminate the Contract in line with the Conditions of Contract.

Reporting

The Contractor shall submit monthly returns/reports as specified below:

- Signed Muster rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance.
- Plant utilization returns
- Progress report detailing production output compared to the programme of works

Provision of Hand tools

The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions.

PART 2: DATA PROVIDED BY THE CONTRACTOR

The Contractor is advised to read the **General Conditions of Contract for Construction Works (2015) 3rd Edition**, published by the South African Institution of Civil Engineering, in order to understand the implications of this Data which is required to be completed. Each item of data given below is cross-referenced to the clause of Conditions of Contract to which it mainly applies.

C1.9

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Clause	Data															
<p>1.1.1.9</p> <p>1.2.1.2</p>	<p>The Contractor is:</p> <p>Name:</p> <p>The Address of the Contractor is:</p> <p>Address (physical):</p> <p style="text-align: center;">.....</p> <p>Address (postal):</p> <p>Telephone: Facsimile:</p> <p>E-mail:</p>															
6.5.1.2.3	The percentage allowance to cover overhead charges is 14%.															
	The Works are to be completed within 3 months															
6.8.3	<p>The variation in cost of all special materials is to be provided in the table SM 1 for special materials. The rates and prices for the special materials shall be furnished by the Bidder, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies. The quoted price is the ruling price on the Month prior to close of bid.</p> <p>TABLE: SM1</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="width: 35%;">Special Materials*</th> <th style="width: 15%;">Unit</th> <th style="width: 50%;">Rate or Price for the base month</th> </tr> </thead> <tbody> <tr> <td>Bitumen (specify type)</td> <td></td> <td></td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table> <p>*Contractor to indicate the type, unit and rate of special material to be listed. The Contractor shall substantiate the above rates or prices with acceptable documentary evidence. Contractor to provide any other Special Materials if deemed necessary.</p> <p>N.B. Diesel, reinforcing steel, and cement will not be accepted as special material.</p>	Special Materials*	Unit	Rate or Price for the base month	Bitumen (specify type)		
Special Materials*	Unit	Rate or Price for the base month														
Bitumen (specify type)																
.....														
.....														
.....														

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.3 PRO FORMA - PERFORMANCE GUARANTEE

CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE TOWNSHIP

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 Accepted and such amendments or additions to the Contract as may be agreed in writing between the parties.

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

Amount in words:

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

Amount in words:

“Expiry Date” means:

CONTRACT DETAILS

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

1. VARIABLE PERFORMANCE GUARANTEE

1.1 Where a Variable Performance Guarantee has been selected, the Guarantor’s Liability shall be limited during the following periods to diminishing amounts of the guaranteed sum as follows:

1.1.1 From and including the date of signing the performance Guarantee up to and including the date of the interim payment certificate certifying , for the first time, more than 50% of the contract sum:

1.1.2

R.....

C1.11

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(Amount in words.....)
1.1. 2 From the day following the date of the said interim payment certificate 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, whichever occurs first:

R.....

(Amount in words.....)

1.2. The Employer's Agent and/or the Employers shall advise the Guarantor in writing of the date on which the interim payment certificate certifying, for the first time, more than 50% of the contract sum, has been issued and the date on which the certificate of completion of the works has been issued.

2. FIXED PERFORMANCE GUARANTEE

- 2.1 where a fixed performance Guarantee has been selected, the Guarantor's liability shall be limited to the amount of the guaranteed sum.
- 2.2 The Guarantor's period of liability shall be from and including the date on which the performance Guarantee is signed, up to and including the expiry date, or the date of issue by the Employers' Agent of the certificate of completion of the works, or the date of payment in full of the guaranteed sum, whichever occurs first.
- 2.3 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. CONDITIONS APPLICABLE TO VARIABLE AND FIXED PERFORMANCE GUARANTEES

- 3.1 The Guarantor hereby acknowledges that:
 - 3.1.1 Any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention to create a suretyship.
 - 3.1.2 its obligation under this Performance Guarantee is restricted to the payment of money.
- 3.2 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 3.2.1 to 3.2.3
 - 3.2.1 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 3.2.2;
 - 3.2.2 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 3.2.1 and the sum certified has still not been paid;
 - 3.2.3 A copy of the aforesaid payment certificates which entitles the Employer to receive payment in terms of the Contract of the sum certified in 3.2.
- 3.3 Subject to the Guarantor's maximum liability referred to in 1.1 or 2.1, 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's physical address calling up this Performance Guarantee, such demand stating that:

C1.12

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 3.3.1 the contract has been terminated due to the Contractors default and that this Performance Guarantee is called upon in terms of 3.3; or
- 3.3.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called upon in terms of 3.3; and
- 3.3.3 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.
- 3.4 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 3.2 and 3.3 shall not exceed the Guarantor's maximum liability in terms of 1.1 or 2.1.
- 3.5 Where the Guarantor has made payment in terms of 3.3, 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 Guarantee 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 Employers bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund
- 3.6 Payment by the Guarantor in terms of 3.2 or 3.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor
- 3.7 Payment by the Guarantor in terms of 3.3 will only be made against the return of the original Performance Guarantee by the Employer
- 3.8 The Employer shall have the absolute right to arrange his affairs with the contractor in any manner which the Employer may consider fit and the Guarantor shall not have the right to claim release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor
- 3.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith
- 3.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 1.1.2 or 2.2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired
- 3.11 This Performance Guarantee, with the required demand notices in terms of 3.2 or 3.3, shall be regarded as a liquid document for the purposes of obtaining a court order
- 3.12 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.

C1.13

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Signed at.....

Date.....

Guarantor's signatory (1).....

Capacity.....

Guarantor's signatory (2).....

Capacity.....

Witness signatory (1).....

Witness signatory (2).....

C1.14

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.4 Form Agreement in terms of the Mine Health and Safety Act, (Act No. 29 of 1996) as amended by the Mine Health and Safety Amendment Act (Act No. 72 of 1997) and the Mineral Resources and Petroleum Development Act (Act No. 28 of 2002)

THIS AGREEMENT made at on this the day of in the year between the **BA-PHALABORWA LOCAL MUNICIPALITY** (hereinafter) called “the

Employer” of the one part, herein represented by in his

capacity as and delegate of the Employer in terms of the Employer’s standard powers of delegation pursuant to the

provisions of Act No. 7 of 1998 and in his capacity as the Contractor and being duly authorised by virtue of a resolution appended hereto as **ANNEXURE A**.

WHEREAS the Employer is desirous that certain works be constructed, as stated above and has accepted a tender by the Contractor for the construction, completion and maintenance of such works and whereas the Employer and the Contractor have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Contractor with the provisions of the Mine Health and Safety Act (Act No.29 of 1996); as amended by the Mine Health and Safety Amendment Act (Act No. 27 of 1997), the Mineral Resources and Petroleum Development Act (Act No. 28 of 2002) and all the applicable Regulations of the said Acts.

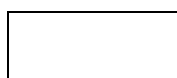
NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1.The Contractor declares himself conversant with all the requirements, regulations and standards of the said Acts and Amendments of the Acts, as well as with the procedures and safety rules of the Employer as pertaining to the Contractor and all his Sub-contractors.
- 2.The Contractor accepts responsibility for compliance with all the requirements, regulations and standards of the Acts and Amendments of the Acts, as well as with the procedures and safety rules of the Employer as pertaining to the Contractor and all his Sub-contractors.
- 3.The Contractor, as the appointed Mine Manager of the Employer (Owner of the mine / borrow pit / quarry), shall undertake all the duties and accept all the responsibilities of the owner in compliance with the said Acts, Amendments and its Regulations.
- 4.The Contractor, as the appointed Mine Manager of the Owner, shall in turn appoint a Sub-Ordinate Mine Manager, a Responsible Mine Surveyor/ Competent Person and a Competent Person in Charge of Machinery who shall undertake the duties as delegated to them in terms of their appointments.
- 5.The Contractor shall himself obtain the necessary authorisation for mining, quarrying, blasting and crushing for all the borrow pit sites.
- 6.The Contractor shall assume responsibility for the Environmental Management Programme (EMP) in respect of all the borrow pit sites and quarries (mines) and shall ensure that the sites are rehabilitated at the conclusion of the contract.
- 7.The Contractor shall comply with all the provisions and requirements as set out in the EMP and in the said Acts, Amendments and its Regulations.

C1.15



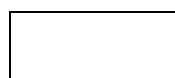
Contractor



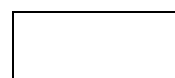
Witness 1



Witness 2



Employer



Witness 1



Witness 2

8. This Agreements shall hold good from the date of signature until the date on which a Closure Certificate is issued by the Mining Authority (Department of Minerals and Energy).

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

SIGNED ON BEHALF OF THE EMPLOYER

AS WITNESS:

.....

(Signature)

NAME(Print):

SIGNED ON BEHALF OF THE CONTRACTOR

AS WITNESS:

1.

(Signature)

NAME(Print):_____

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.5 Appointment in Terms of Section 3(1) of the Mine Health and Safety Act (Act No. 29 of 1996) as amended by the Mine Health and Safety Amendment Act (Act No. 72 of 1997)

I, in my capacity as _____,
having been appointed, in terms of **Section 4(1)** of the Act (as amended), by the
_____ of the **BA-
PHALABORWA LOCAL MUNICIPALITY**, who is the owner of the Mine(s) to be worked under the
requirements of the abovementioned Acts, hereby, in terms of **Section 3(1)** of the Act (as amended),
appoint

..... in his capacity as
..... of the
Contractor,
.....of
address:

.....
...and

contact number: **10/20/21** to perform all the functions entrusted to the Employer by

Sections 2 and 3 of the Act (as amended) for all the borrow pits on Contract No: **CONTRACT NO.
10/20/21–ELECTRIFICATION OF SELWANE TOWNSHIP.**

SIGNED:

DATE:

WITNESS: 1. 2.

NAME(Print): 1. 2.

I,, having been appointed in terms of Section 3(1) of the
Act (as amended) to perform all functions entrusted to the Employer by Sections 2 and 3 of the Act (as
amended) hereby accept the above appointment.

SIGNED:

DATE:

WITNESS: 1. 2.

NAME(Print): 1. 2.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.6 AGREEMENT IN TERMS OF THE OCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

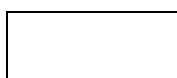
THIS AGREEMENT made at on this the day of in the year..... between **BA-PHALABORWA LOCAL MUNICIPALITY** (hereinafter called "the Employer") on the one part, herein represented by in his capacity as and delegate of the Employer and..... (hereinafter called "the Principal Contractor") of the other part, herein represented by in his capacity as

WHEREAS the Employer is desirous that certain works be constructed, **CONTRACT NO. 10/20/21 – ELECTRIFICATION OF SELWANE TOWNSHIP** and has accepted a tender by the Principal Contractor for the construction, completion & maintenance of such works and whereas the Employer and the Principal Contractor have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Principal Contractor with the provisions of the Occupational Health and Safety Act 1993 (Act 85 of 1993 and the Construction Regulation, July 2003);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Principal Contractor shall execute the work in accordance with the contract documents pertaining to this contract.
2. This Agreement shall hold good from its commencement date, which shall be the date of a written notice from the employer or engineer requiring him to commence the execution of the Works, to either:
 - a) the date of the final certificate issued in terms of the relevant clauses of the General Conditions of Contract (hereinafter referred to as "the GCC 3rd Edition, 2015"), as contained in the contract documents pertaining to this contract, or
 - b) the date of termination of the contract.
3. The Principal Contractor declares himself to be conversant with the following:-
 - a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act.
 - i) Section 8: General duties of employers to their employees.
 - ii) Section 9: General duties of employers and self-employed persons to persons other than employees.
 - iii) Section 37: Acts or omissions by employees or mandatories and
 - iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.
 - v) Construction Regulations 2003, and other safety regulations, as applicable.

C1.18


Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

- b) The procedures and safety rules of the employer as pertaining to the Principal Contractor and to all his sub contractors.

- 4. The Principal Contractor is responsible for the compliance with the Act by all his sub-contractors, whether or not selected and/or approved by the employer.

- 5. The Principal Contractor warrants that all his and his sub-contractors' employees are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such employees are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

- 6. The Principal Contractor undertakes to ensure that he and/or his sub-contractors and/or their respective employees will at all times comply with the following conditions:
 - a) The Principal Contractor shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Principal Contractor shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Principal Contractor obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.

 - b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Principal Contractor to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.

 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Principal Contractor and/or his employees and/or his sub-contractors.

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:

WITNESS:

- 1.
NAME (Print):
- 2.
NAME (Print):

SIGNED FOR AND ON BEHALF OF THE PRINCIPAL CONTRACTOR:

WITNESS:

- 1.
NAME (Print):
- 2.
NAME (Print):

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C1.7 - CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993).

The signatory for the company that is the Contractor in terms of the above-mentioned Contract and the Mandatory in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the Board of Directors.

An example is given below:

"By resolution of the Board of Directors passed at a meeting held on _____
2020,

Mr/Ms _____ whose
signature

appears below, has been duly authorised to sign the AGREEMENT in terms of THE
OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 of 1993) on behalf of _____

SIGNED ON BEHALF OF THE COMPANY : _____

IN HIS/HER CAPACITY AS : _____

DATE : _____

SIGNATURE OF SIGNATORY : _____

WITNESS 1

NAME 1
(IN CAPITALS)



Contractor



Witness 1



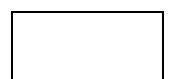
Witness 2



Employer



Witness 1



Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF 105 UNITS AT GA-SELWANE VILLAGE

C2 PRICING DATA

C2.1 Pricing Instructions

C2.2 Bill of Quantities

C2.1

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

C2.1 PRICING INSTRUCTIONS

1. GENERAL

The pricing instructions describe the criteria and assumptions which will be assumed in the Contract that the Bidder has taken into account when developing his prices. The Bills of Quantities record the Contractor's rates for providing supplies, services, engineering and construction works in accordance with the Scope of Work. The terms of payment and the provisions for price adjustment, if applicable, are established in the Contract Data. These items are not described in the Pricing Data. The Bidder's obligations in pricing the Bidder offer and the Employer's undertakings in the checking and correction of arithmetical errors are dealt with in the Standard Conditions of Bidder contained in Annexure F of SANS 294, as amended in and read in conjunction with the Bidder Data.

2. DOCUMENTS MUTUALLY EXPLANATORY

The documents forming the Contract are to be taken as mutually explanatory of one another. The Bill of Quantities forms an integral part of the Contract Documents and shall be read in conjunction with the Bidder Data, Contract Data, Scope of Work, Site Information General and Special Conditions of Contract, the Specifications and the Drawings.

3. DEFINITIONS

For the purpose of this Bill 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 Scope of Work and Site Information.
- Quantity : The number of units of work for each item.
- Rate : The payment per unit of measurement at which the Contractor Contracts to do the work.

C2.1.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Amount : The product of the quantity and the rate Bid item.
Sum : An amount contracted for an item, the extent of which is described in the Bill of Quantities, the specifications or elsewhere but the quantity for an of work of which is not measured in any units.

4. DESCRIPTIONS

Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

5. REFERENCES

The clauses in a specification in which further information regarding the schedule item can be obtained appear under "Reference clause" in the Bill. The reference clauses indicated are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, eg. G for SABS 1200 G.

6. UNITS OF MEASUREMENT

The units of measurement indicated in the Bill of Quantities are metric units. The following abbreviations are used in the Bill of Quantities:

%	=	per cent
H	=	hour
Ha	=	hectare
kg	=	kilogram
kl	=	kilolitre
km	=	kilometre
km-pass	=	kilometre-pass
kW	=	kilowatt
l	=	litre
m	=	metre
mm	=	millimetre
MN	=	meganewton
MN-m	=	meganewton-metre
MPa	=	megapascal
m ²	=	square metre

C2.1.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

m ³	=	cubic metre
m ³ -km	=	cubic metre-kilometre
m ² -pass	=	square metre-pass
no	=	number
PC sum	=	Prime Cost sum
Prov Sum	=	Provisional Sum
sum	=	lump sum
t	=	ton (1 000 kg)

7. NET MEASUREMENTS

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for off-cuts and waste.

8. QUANTITIES

The quantities set out in these Bills of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities. The Contract Amount to be determined in accordance with the conditions of contract identified in the Contract Data shall be computed from the actual quantities of authorized work done, value at rates determined in terms of the Contract Data, against the respective items in the Bill of Quantities.

9. CURRENCY

All rates and sums of money quoted in the Bill of Quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

10. VALUE ADDED TAX

Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the Bill of Quantities. VAT will be added as a single entry to the summary.

11. RATES AND PRICES

11.1 General

a) The Contractor must price each item in the Bill of Quantities in BLACK INK. Reproduced computer printouts of the Bills of Quantities will not be acceptable.

C2.1.3

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

b) The rates and prices to be inserted in the Bill of Quantities shall cover all the services and incidentals for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Bidder is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

c) Where the Contractor is required to furnish detailed drawings and designs or other information in terms of the Contract Data, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts contracted for the items scheduled in the Bill of Quantities. Separate additional payments will not be made.

d) A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill. The Contractor will not be paid for items against which no rate or lump sum has been entered in the Bill of Quantities.

e) Should the Contractor group a number of items and contract 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.

f) Should the Contractor indicate against any item that compensation for such item is included in another item, the rate for the item included in another item shall be deemed nil.

g) A submission may be regarded as non-responsive if any rates or lump sums in the Bill of Quantities are, in the opinion of the Employer, unreasonable or out of proportion.

11.2 "Rate only" items

The Contractor shall fill in a rate (in the rate column) against all items where the words "rate only" appear in the Amount column, which rate will constitute payment for work which may be done in terms of this item. Such "rate-only" items are used where it is estimated that little or no work will be required under the item or where the item is to be considered as an alternative to another item for which a quantity is given.

11.3 Arithmetic

Excepting where Sum Amounts are required or where Provisional Sums have been indicated, the Contractor shall enter an applicable rate in the Rate Column of the Bill of Quantities for each scheduled item. He shall also enter an appropriate sum in the Amount column for each scheduled item, by determining in the applicable line item the product of the Quantity and the Unit Rate. If there is an error in the line item resulting from the product of the unit rate and the quantity, the rate shall be binding and the

C2.1.4

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

error of extension as entered in the Bidder offer will be corrected by the Employer in determining the Contract Price.

Where there is an error in addition, either as a result of other corrections required by this checking process or in the Bidder's addition of prices, such error will be corrected by the Employer in determining the Contract Price.

11.4 Labour Intensive work

Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column or as a prefix or suffix against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only.

The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a deviation from the contract. The items marked with the letters 'L' are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour-intensive specification in the Scope of Works.

Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target.

Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

12. VARIATION IN TEXT

No alteration, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognized; the original wording of the Bill of Quantities will be adhered to.

C2.1.5

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE VILLAGE

C2.2 BILL OF QUANTITIES

C2.2.1

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ELECTRIFICATION OF GA-SELWANE VILLAGE				
Item	Description	Amount		
NUMBER OF STANDS /CONNECTIONS 105)		Materials	Labour	Total Price
A	Preliminaries & General			
B	Pegging out the works			
C	Digging Holes			
D	Plant poles			
E	MV Structures Three Phase			
F	MV Stays			
G	LV Structures			
H	LV Stays			
I	Service Boxes			
J	Stringing			
K	Transformer Installation			
L	LV Protection			
M	Installation Earthing			
N	Pole Numbering			
O	Commissioning			
P	Other			
Q	House Connections			
R	Excavate and plant shack poles			
S	LV Conductor (Supply Cable)			
TOTAL				
SUB TOTAL 1				
CONTINGENCY @10%				
SUB TOTAL 2 INCL CONTINGENCY				
Add 15% VAT				
Total Project Cost				

C2.2.2

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

BILLS OF QUANTITIES ELECTRIFICATION OF GA-SELWANE VILLAGE									
Item	Description	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
A	Site Establishment & Safety								
1	Site Camp, Store, personnel, rental, transport, name board etc	Sum			1				
2	Payment of CLO @ R5 000,00 per month (Provisional Amount)	Month			4	R 5 500,00	R 0,00	R 22 000,00	R 22 000,00
3	Payment of Student (Provisional Amount)	Month			4	R 3 850,00	R 0,00	R 15 400,00	R 15 400,00
4	Payment of worker for entry and exit medical testing	Sum			2				
5	Payment of Security (2 X Personell)	Month			4				
6	Payment of PSC Members - 6 members x R150 x Duration (Provisional Amount)	Month			4	R 1 980,00	R 0,00	R 7 920,00	R 7 920,00
7	SHE Representative (Prov. Amount)	Month			4	R 6 050,00	R 0,00	R 24 200,00	R 24 200,00
8	Compliance with OHS ACT incl. Safety File and safety instructions	Sum			1				
9	Training for Local Labourers				1				
(i)	Generic & Non-Generic Skills	Sum			1				
(ii)	Occupational Health and Safety Including Compliance with Covid-19 Regulations	Sum			1				
10	EPWP Salary(14 labours for 3 Months) (Provisional Amount)	Month			4	R 64 372,00	R 0,00	R 257 488,00	R 257 488,00
11	PPE for Local Labourers Including Covid-19 Health and Safety Material and Tools required for compliance purpose (EPWP branded)	Sum	1	R 14 025,00					
SUB-TOTAL A									
B	Pegging out the works	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	MV Pegging	km			1,51				
2	LV Pegging (Wayleaves & Tree cutting permits)	km	0		3,1				
3	AS-Built drawing by surveyor	km			4,61				
4	Bush Clearing and Tree Felling	e.a.			80				
SUB-TOTAL B									

C2.2.3

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C	Digging Holes	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1A	LV stay back-actor or hand	e.a.			5				
1B	Rock Drill	e.a.			5				
1C	Compressors	e.a.			10				
1D	9m LV Strut Pole Rock Drill	e.a.			0				
1E	11m LV Strut Pole Rock Drill	e.a.			14				
2A	MV stay back-actor or hand	e.a.			7				
2B	MV Stay Rock Drill	e.a.			8				
2C	MV Stay Compressors	e.a.			7				
2D	12m MV Strut Pole Rock Dril	e.a.			8				
2E	MV Flying Stay 11m	e.a.			0				
3A	7m Pole back-actor or hand	e.a.			25				
3B	Rock Drill	e.a.			20				
3C	Compressors	e.a.			30				
4A	9m Pole back-actor or hand	e.a.			10				
4B	Rock Drill	e.a.			6				
4C	Compressors	e.a.			10				
5A	10m Pole back-actor or hand	e.a.			0				
5B	Rock Drill	e.a.			0				
5C	Compressors	e.a.			0				
6A	11m Pole back-actor or hand	e.a.			7				
6B	Rock Drill	e.a.			8				
6C	Compressors	e.a.			17				
7A	13m Pole back-actor or hand	e.a.			0				
7B	Rock Drill	e.a.			0				
7C	Compressors	e.a.			0				
SUB-TOTAL C									
D	Plant poles	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	7m Wood 120-140mm tops	e.a.	75		75				
2	9m Wood 140-160mm tops	e.a.	22		22				
3	9m Wood 160-180 mm tops	e.a.	4		4				
4	10m Wood 160-180mm tops	e.a.	0		0				
5	10m Wood 180-200mm tops	e.a.	0		0				
6	11m Wood 160-180mm tops	e.a.	15		15				
7	11m Wood 180-200mm tops	e.a.	17		17				
8	12m Wood 180-200mm tops	e.a.	8		8				
9	13m Wood 180-200mm tops	e.a.	0		0				
SUB-TOTAL D									

C2.2.4

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

E	MV THREE PHASE	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	Int ass delta 0 deg	e.a.	0		0				
2	Int ass stag vertical (0-10 deg)	e.a.	10		10				
3	Int ass stag vertical (10-30deg)	e.a.	1		1				
4	Strain ass delta (0-30 deg)	e.a.	0		0				
5	Strain ass delta (30-90 deg)	e.a.	0		0				
6	T-off ass int-delta	e.a.	0		0				
7	T-off ass str-delta	e.a.	0		0				
8	T-off ass int vert	e.a.	4		4				
9	Susp ass vert (10-30 deg)	e.a.	0		0				
10	Strain ass vertical (30-90 deg)	e.a.	8		8				
11	Terminal ass vert	e.a.	2		2				
12	In-line strain vert	e.a.	0		0				
SUB-TOTAL E			25						
F	MV Stays	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	1 Off conv anchor	e.a.	22		22				
2	1 Off flying stay	e.a.	0		0				
3	1 Off strut pole 12m	e.a.	8		8				
SUB-TOTAL F									
G	LV Structures	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	Int / susp (0-30 deg)	e.a.	72		72				
2	Intermediate service	e.a.	0		0				
3	Strain (0-60 deg)	e.a.	0		0				
4	Strain (60-90 deg)	e.a.	18		18				
5	Terminal	e.a.	20		20				
6	3 Ph Tfr Terminations Trf	e.a.	0		0				
7	T-off from interm	e.a.	12		12				
8	T-off from strain	e.a.	0		0				
9	Cross int-int ass	e.a.	2		2				
10	Cross int-strain ass	e.a.	0		0				
SUB-TOTAL G			124						
H	LV Stays	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	1 Off conv anchor	e.a.	20		20				
2	1 Off flying stay	e.a.	0		0				
3	1 Off strut pole 9m	e.a.	0		0				
4	1 Off strut pole 11m	e.a.	14		14				
SUB-TOTAL H									
I	Service Boxes	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1A	2 -4 Way Split Meter box : 1 x 50 A mcb	e.a.	48		48				
2B	5 - 8 Way Split Meter box : 2 x 63 A mcb	e.a.	0		0				
SUB-TOTAL I									

C2.2.5

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

J	Stringing	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	Squirrel conductor	m	0		0				
2	Fox conductor	m	4959,9		4959,9				
3	Mink conductor	m							
4	35 mm sq ABC 1-ph	m	0		0				
5	35 mm sq ABC 2- ph	m	0		0				
6	35 mm sq ABC 3-ph	m	0		0				
7	70 mm sq ABC 1-ph	m	0		0				
8	70 mm sq ABC 2-ph	m	0		0				
9	70 mm sq ABC 3-ph	m	3934		3933,6				
10	MV MINK full tension joint	e.a.	30		30				
11	LV joint 35 mm full tension	e.a.	0		0				
12	LV joint 70 mm full tension	e.a.	24		23,6016				
SUB-TOTAL J									
K	Transformer Installation	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
Transformers: 11kV									
1	200kVA x 3 Ph (1 off) - relocate	ea	0		0				
2	200kVA x 3 Ph (1 off) - new	ea	0		0				
3	100kVA x 3 Ph (2 off) - relocate	ea	0		0				
4	100kVA x 3 Ph (2 off) - new	ea	3		3				
5	50kVA x 3 Ph (0 off) - relocate	ea	0		0				
6	50kVA x 3 Ph (0 off) - new	ea	1		1				
7	32kVA x 2 Ph (0 off) - relocate	ea	0		0				
8	32kVA x 2 Ph (0 off) - new	ea	1		1				
9	25kVA x 3 Ph (0 off) - relocate	ea	0		0				
10	25kVA x 3 Ph (0 off) - new	ea	0		0				
11	16kVA x 1 Ph (1 off) - relocate	ea	0		0				
12	16kVA x 1 Ph (1 off) - new	ea	0		0				
SUB-TOTAL K									
L	LV Protection Morsdorf type fuses	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	50 A	e.a.	0		0				
2	80A Dual phase (32kVA)	e.a.	2		2				
3	80A Three phase (50kVA)	e.a.	3		3				
4	125A	e.a.	0		0				
5	160A	e.a.	9		9				
SUB-TOTAL L									

C2.2.6

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

M	Installation Earthing	Unit	MQty	MRate	LQty		Mtotal	Ltotal	Total
1	MV Earthing (2 x compl 3 point star earth (crows))	e.a.	5		5				
2	LV Earthing (1 x compl 3 point star earth (crows))	e.a.	10		10				
3	Bonding	e.a.	15		15				
SUB-TOTAL M									
N	Pole Numbering	Unit	MQty	MRate	LQty		Mtotal	Ltotal	Total
1	MV pole number	e.a.	25		25				
2	LV pole number	e.a.	101		101				
SUB-TOTAL N									
O	Commissioning	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	Test & commission trfs and MV equipment	e.a.	5	R 0,00	5				
SUB-TOTAL O									
P	Other	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	Link assembly (On-load) per phase	ea	24		24				
2	Link assembly (Off load) per phase	ea	0		0				
3	Drop-out fuses three phase	ea	15		15				
4	Drop-out fuses dual phase	ea	2		2				
5	Sample line /Material Board	sum	0		0				
6	Live Work (Number of T-Offs)	ea	3		3				
7	Remove existing LV Poles	ea	0		0				
8	Retoute existing conductor	m	0		0				
9	Remove existing stay	ea	0		0				
10	Remove existing transformer	ea	0		0				
11	Remove existing Transformer	ea	0		0				
12	Remove existing dressing	ea	0		0				
13	Ant-climbing device	ea	41		41				
14	Tree felling (trunk diameter > 300mm)	ea	42		42				
SUB-TOTAL P									
Q	House Connections	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	Underground connection	ea	0		0				
2	Overhead connection	ea	105		105				
3	Supply ECU base, fixing rails and plug	ea			0				
4	Supply 20A ECU (internal ELPU)	ea			0				
5	Supply Split Meter Din Rail 20A WS with Keypad Conlog Type	ea	105		105				
6	Sealing of meters	ea	105		105				
7	COC Certificate ECA version	ea	105		105				
8	Supply and install additional 63A circuit breaker	ea	0		0				
9	Supply and Install and wire 63A curve-2 cb to a split pp meter	ea	0		0				
10	Supply and mount readyboard	ea	105		105				
11	Capture and submit list of customers name and surname stand no meter no and contact no	ea	2		2				
SUB-TOTAL Q									

C2.2.7

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

R	Excavate and plant shack poles	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1A	5m Wood 120-140 mm tops	e.a.	10		10				
1B	Rock Drill	e.a.	30		30				
1C	Compressors	e.a.	20		20				
2	Compressors	e.a.	0						
3	Hand Excavate Cable trench - house connection	m	0						
4	Hand Excavate Cable trench-Road Crossing	m	0						
5	Install Cable Sleeves 110mm	m	0						
SUB-TOTAL R									
S	LV Conductor (Supply Cable)	Unit	MQty	MRate	LQty	LRate	Mtotal	Ltotal	Total
1	4mm sq Airdac SNE plus Pilot wires	m	0		0				
2	10mm sq Airdac SNE plus Pilot wires	m	4095		4095				
SUB-TOTAL S									

C2.2.8

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

C3.1 SCOPE OF WORK

STATUS

In the event of any discrepancy between the Scope of Works and a part or parts of the COLTO 1998, SANS 1200 Standardized Specifications, the Bill of Quantities and the Drawings, the Project Specifications, shall take precedence and prevail in the Contract.

Over and above the normal Building and Allied works to be implemented by employing skilled and unskilled labour the works specified in the “Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)” shall be undertaken using Labour Intensive Construction methods

C3.1 DESCRIPTION OF THE WORKS

Refurbishment of a sports facility.

C3.1.1 EMPLOYER'S OBJECTIVES

The Clients objective is to address the backlog of amenities and sports facilities in previously disadvantaged communities and rural areas.

The project objectives are in-line with the Ba-Phalaborwa's objectives of service delivery, job creation, poverty alleviation and social upliftment.

Labour-intensive works

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of this Scope of Work.

Labour-intensive competencies of supervisory and management staff

Contractors shall engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/Supervisors at NQF “National Certificate: Supervision of Electrical Engineering Construction Processes” and Site Agent/Manager at NQF level 5 “Manage labour-intensive Construction Processes” or equivalent QCTO qualifications..

The main objective of this project is to ensure that the community of Namakgale has a stadium. The scope of service covers the design and adherence to the given specifications including any by-laws governing all civil, structural, electrical and mechanical aspects.

C3.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The objective will be to utilise the envisaged funds to an optimum in order to create a facility that will be to the benefit of the total community in the Ba-Phalaborwa Local Municipality.

C3.1.2 OVERVIEW OF THE WORKS

The BA-PHALABORWA Local Municipality wishes to implement the project; **“ELECTRIFICATION OF SELWANE TOWNSHIP”**. The project entails Electrification of Selwane township.

The work will be carried using Labour- Intensive approach as much as possible. Labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be Constructed using local workers who are temporarily employed in terms of this Scope of Work.

C3.1.3 EXTENT OF WORKS

The design for **“ELECTRIFICATION OF SELWANE TOWNSHIP”** involves the following items;

The Contractor shall provide all Plant and Materials Equipment and labour for the whole of the works, which includes

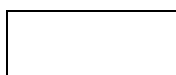
Outage/Livework Requests

A schedule for an outage/live work when required will be done as directed by the Engineer.

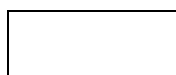
Permanent work

1. Set out all poles and any stays associated with a particular structure, using the services of an Eskom approved registered surveyor.
2. Excavate pole, stay and strut holes, erect wooden poles, stays and struts and backfill and compact pole, stay and strut holes in layers of 300mm.
3. Install MV and LV stays in accordance with the Eskom Distribution Standard. Percussion stays may be used on condition that an approved sub-contractor performs the supply and installation of the stays. Pre-tension certificates are supplied per stay. Pre-tensioning are done on all stays as specified in the Eskom Distribution Standard.
4. Assemble the bare overhead MV structures as well as the Arial Bundle Conductor LV structures according to the Distribution Standards. Wooden poles of 7m for house connections, 9m for LV reticulation and 11m for MV reticulation shall be used and structures are single-pole midblock design. Only LV ABC conductor sizes 35mm²/70mm² 4 core are to be utilized.
5. Assemble and install the MV Links according to Eskom Distribution Standards.
6. Run out and string bare overhead line conductor (ACSR), code name Mink.
7. Install the transformers, including MV Surge Arrestors, LV fuse protection units. Pole mounted shall be 11kV/415V Dyn11 three phase with a capacity of 100kVA. (Also refer to Bill of Quantities)
8. Excavate trenches to a depth of at least 500mm for type 1 MV and LV three point star earth electrodes, install electrodes and backfill and compact on completion.
9. Install pole top distribution boxes complete with one pigtail bolt and one eye nut per distribution box.
10. Connect pole top boxes to LV feeders with phasing.
11. Test and commission infrastructure.
12. Excavate 7m and 9m pole holes where 7m service/shack poles is necessary, erect 7m wooden poles, backfill and compact pole in layers of 300mm.

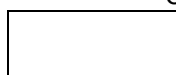
C3.2



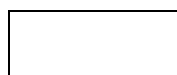
Contractor



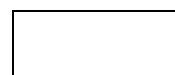
Witness 1



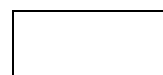
Witness 2



Employer



Witness 1



Witness 2

13. Install keypad of split pre-paid meters inside the houses.
14. Install meters in pole top boxes and connect to house distribution board via overhead 10mm² 2 core Airdac, according to Eskom Distribution Standards.
15. Test and commission House Connections and issue COC's.
16. Produce as build drawings by a qualified Eskom approved surveyor) complete with a comprehensive PCS data.
17. Signage and pole numbering specification to be requested from Engineer.
18. The work will be taken over by the Eskom on completion.

Restrictions in Providing the Works

The Contractor shall visit every resident and arrange access for mid-block electrification.

The Contractor shall treat residents in a courteous, friendly and polite manner and keep them informed of changes to the required access.

The Contractor shall foster close relationships with recognized community structures.

The Contractor shall ensure that staff other than key Contractor-staff is employed from the local community.

Definition of Completion

The works shall be completed in accordance with the specifications in all respect and taken-over by the Employer and Ba-phalaborwa. The cleaning of the site and breaking of camp shall be done within 1 week after Completion

Project Steering Committee

A Project Steering Committee will be constituted by the ward councillor and selected members from his ward committee. The ward councillor will appoint a community liaison officer (CLO). The CLO will assist the engineer and contractor with all liaison required with the community and labour force.

Scope of Mandatory Subcontract Work

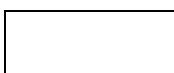
The following portions of the works shall be subcontracted to CIDB registered contractors in accordance with the subcontracting procedures described hereunder:

Sub-contractors from the local community shall be employed for the following activities (refer to bill of quantities section P: House Connections):

- Overhead connection (Airdac from pole top box to house)
- Install ECU base, fixing rails and plug
- Install 20A ECU (internal ELPU)
- Sealing of meters
- Capture and upload of customer data new & existing

It remains the contractor's responsibility to enter into agreement with these subcontractors, to negotiate payment, guarantees and percentage and duration of the retention kept, strictly in accordance with the CIDB regulations. No direct payments to, or sessions in favour of subcontractors will be entertained. It stays the responsibility of the main contractor

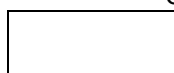
C3.3



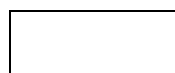
Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

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

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

Material & Equipment Specifications

General

The Contractor shall erect the MV and LV overhead line reticulation systems in accordance with Eskom Electrification Standards (Wood Structures). The internal MV distribution systems shall comprise of "Mink" aluminium conductor steel reinforced configuration on 11m wooden poles and shall be built to 22kV specifications.

The LV distribution systems shall comprise an aerial bundled conductor (ABC) system, of the supporting core type mounted overhead on either 7m or 9m wooden poles. LV distributor spurs shall extend within a radius of approximately 500m from transformer positions depending on individual voltage drop requirements. LV distributor spurs shall share pole structures with the MV system where these follow parallel routes providing clearance of LV can be achieved.

Transformers shall be of the pole mounted type suitably rated to serve anticipated individual LV distributor loads and shall be of the SABS 780 type. All materials supplied by the Developer shall conform with Eskom Buyer's Guide (Part 9 of DT Standard).

MV Overhead Line

The MV overhead feeder system shall comply with the requirements of Eskom's Distribution Technology, Electrification Standards and Guidelines as and where applicable for an urban concrete pole reticulation system.

a) Conductor

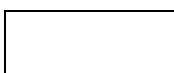
Type	:	Aluminium conductor steel reinforced.
Code Name	:	Mink/Fox-see Bill of Quantities/drawings
Mass	:	85kg/km / 149kg/km
Ultimate tensile strength	:	7 900 / 13 200 Newton
Max working tension	:	@ -5°C + wind 5 240 / 8760 Newton.
Mounting	:	See structure codes on drawings.

The maximum working tension may be exceeded only during the construction stages when the conductors are to be "over-tensioned" to 1.05 x MWT for a period of not less than 8 hours nor longer than 24 hours after which the tension is to be reduced to a figure not to exceed the stated maximum working tension of the conductor concerned.

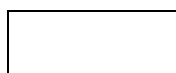
b) Poles

Pole type - Wood

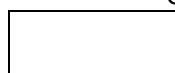
C3.4



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- Pole lengths and 12m for - 9m for LV distributor 9m for LV road crossing, 11m and 12m for MV Line
- Planting depth - 1.8 and 2m respectively
- Pole marker - painted - black on yellow background.

c) Stays

- Type - Fiber glass for MV and Porcelain of LV
- Rods - M20 - 2000 long
- Base plate - 380 x 380 x 6 galvanized
- Stay wire - 7/4mm, 1100 MPA - galvanized
- Planting depth - 2m

Stays are indicated on the drawings by means of the structure codes.

d) Flying Stays

Flying stays shall be installed in the positions indicated on the drawings by the structure codes. Anchor poles shall be as specified for the line structures and of sufficient length to ensure the required ground clearance. Overhead stay wire shall be 7/4.00mm as specified for stays.

e) Struts

Struts shall be installed in the positions indicated on the drawings by the structure codes. Strut poles shall be as specified for the line structures. Line structure poles shall be fitted with suitable ground anchors at all strut positions. Struts shall be fitted with barbed wire anti climbing devices.

f) Insulators, Line Clamps and Other Line Components, Pole Dressing Hardware etc.

All in accordance with Eskom's Distribution Reticulation Technology, Electrification Standards and Guidelines with particular reference to the detailed material take off sheets provided for the various line structures.

g) Sags and Tensions

The Developer shall provide suitable dynamometer sighting rods or other approved apparatus necessary for proper checking of the work. Dynamometers shall be calibrated in kg or kN.

h) Surge Arrestors

Surge arrestors shall be of the metal oxide outdoor hermetically sealed, vertical base mounted type, rated at 22kV, 10kA impulse current.

i) Sectionalizers

Dropout fuses shall be provided for each transformer zone.

Pole Mounted Transformers

Transformers shall generally comply with the following details:

Situation	:	Outdoors
Mounting	:	Suitable for single pole structure
Type	:	SABS 780
kVA rating	:	100/50 (as indicated on drawings)
No load voltage ratio	:	11000/415/231 volt
Vector group	:	Dyn 11
Parallel operation	:	Not required
MV & LV connections	:	External bushings with suitable insulated connections.

The transformers shall be connected on the MV side through the use of links/or fuses as indicated on the drawings.

LV ABC Overhead Lines

LV ABC overhead lines shall comply with the requirements of Eskom's Distribution Reticulation Technology, Electrification Standards and Guidelines as and where applicable. The LV ABC system may share pole structures with the MV system wherever these follow parallel routes.

a) LV Aerial Bundled Conductor

System Detail	-	415/231 volt, 3 phase, 4 wire, 50 Hz
Type ABC	-	Bare Neutral ABC in accordance with SABS 1418

The following ABC sizes are to be utilised (aluminium conductors).

Ultimate strength

(54.6 BN supporting core) - 16 600 N 1690 kgf

Max working tension

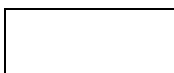
(54.6 BN supporting core) - 6640 N 676 kgf

The ABC shall be installed in strict accordance with the manufacturer's recommendations and so as to ensure that the statutory clearances as specified in the Eskom Distribution Standard are maintained at all times. The Contractor shall submit details of terminations to be used to the Engineer for his approval before installation of the bundle.

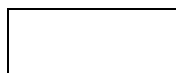
b) Poles

Pole type	Wood
Pole lengths	9m
Planting depth	1.5m respectively
Pole marker	Black painted letters on yellow background.

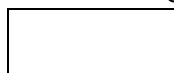
C3.6



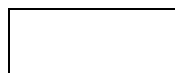
Contractor



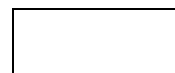
Witness 1



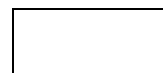
Witness 2



Employer



Witness 1



Witness 2

c) Stays

LV stays for wooden poles in the Eskom Distribution Standard. Stays are indicated on the drawings by means of the structure codes.

d) Flying Stays

LV flying stays for wood poles in the Eskom Distribution Standard and indicated on the drawings by means of the structure codes.

e) Struts

Strut are as detailed for the MV system described in Clause 3.5

f) Line Clamps, Connections, Pole Dressing and Mounting Hardware

All in accordance with Eskom's Distribution Construction Standards.

g) Connectors

Connectors shall be of the insulation piercing type for main and tap conductors, except for the bare neutral when a double PG clamp will be utilized.

The connector housing shall be made entirely of weather resistant plastic materials. No metallic parts outside the housing will be accepted (except for the tightening bolt).

The tightening bolt shall incorporate an over torque shearing head which will allow a clamping torque in conformity with the manufacturer's re-commendations, without the use of any special tools.

No energised parts shall be exposed or accessible by the operators during installation.

h) Mounting brackets

All mounting hardware shall comply with the Eskom Distribution Standard for bare neutral ABC.

Suspensions bracket max. Vertical load - 700 daN

Strain clamps max. horizontal load - 1500 daN

Brackets are to be manufactured from corrosion resistant materials. Galvanised steel brackets are not acceptable.


i) Sags and Tensions

Sags and tensions are as detailed for the MV system described in Clause 3.2.3(g)


j) Surge Arrestors

No surge arrestors are required on the LV system. A 6kV, 10kA impulse surge arrestor will be provided on the LV neutral of the transformer.


C3.7




Contractor




Witness 1




Witness 2



Employer



Witness 1



Witness 2

Civil Infrastructure

The Contractor shall provide the following excavations.

a) Pole holes as required for both MV and LV overhead line systems.

Pole excavations:	5m	-	1200 long 1000 wide 1000 deep
	4m	-	1200 long 1000 wide 1000 deep
	7m	-	1200 long 1000 wide 1300 deep
	9m	-	1200 long 1000 wide 1500 deep
	10m	-	1200 long 1000 wide 1800 deep
	11m	-	1200 long 1000 wide 1800 deep

b) Strut and stay holes as required for both MV and LV overhead line systems.

Strut and stay excavations : 2000 long 1000 wide 1700 deep

c) Trenching for structure and operator earthing systems.

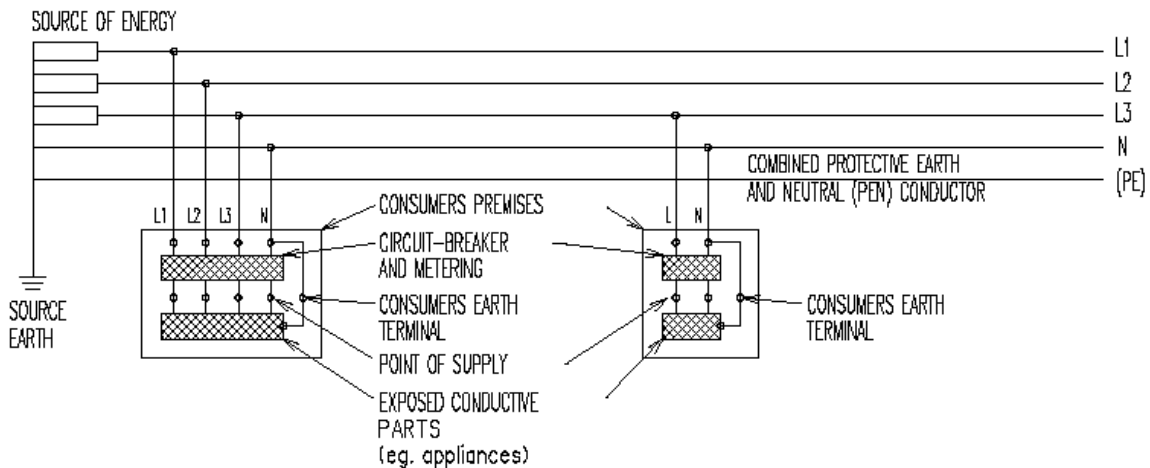
Trench excavation : 300 wide, 600 deep.

Clearances

Eskom Standards as well as Occupational Health and Safety Act shall be adhered to. The overhead line routes require a number of both MV and LV crossings over roads. Correct clearance heights as specified in the Eskom Distribution Standard shall be adhered to. Annexure R details clearance requirements.

Earthing

In accordance with Eskom Distribution Standard Part 2, with particular reference to:



- Earthing system philosophy TN -C - S.

Results of soil resistivity survey at 2 points.

C3.8

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Min Cu area : 16mm² stranded
12mm² solid

- Low Voltage
11 kV system : 30 Ohms
22 kV system : 70 Ohms
- Medium Voltage
11kV system : 30 Ohms
22kV system : 30 Ohms

NB. : The extent of earthing must be indicated on the Design, Construction and "As Built" drawings.

Allowance shall be made for the supply and installation of the various earthing requirements as listed hereunder.

- Bonding all pole top and/or cross arm hardware
- Basic pole earthing - MV and LV systems. (All structures not listed below).
- Pole mounted transformer tank and MV surge arrestors.
- Pole mounted transformer LV neutral.
- LV ABC at first structure from transformer.

Budget Energy Controllers

20A ECU's will be supplied in accordance with Eskom's Specification.

Pole Top Boxes


A pole-top distribution box shall be used to connect all customers from poles along the LV distributor. The pole-top distribution box shall be in accordance with 240-75659038. The 50A MCB inside the pole-top box can be used to connect four customers with 20 A supplies. Where a customer with a 60 A supply is to be connected from a pole-top box an additional 63A MCB shall be mounted in parallel with the existing MCB and the customer shall be fed separately.

The pole top distribution boxes are to comply with the requirements of Eskom's Distribution Reticulation Technology, Electrification Standard as and where applicable.


- Two way distribution boxes are to be equipped with 1 x 50A circuit breaker.

The 10mm² core of the service cable shall be used to supply the 63 A MCB from the 50 A MCB as indicated in drawing D-DT-0363. Where a project consists of only 60 A connections a pole-top box with


C3.9




Contractor




Witness 1




Witness 2



Employer



Witness 1



Witness 2

a 120 A MCB shall be used. The 120 A MCB can be used to connect four customers with 60 A supplies. The pole-top box shall be secured to the pole stainless steel strapping D-DT-3131.

Internal House Installation

Only installations with COC's will be connected. ECU's with 4-way outlet boxes will be installed if no electrical installation exits in dwellings.

CLEARANCE BETWEEN MV AND LV CONDUCTORS

The line profile for the 11kV line will satisfy the clearances given in the Occupational Health and Safety Act, Act No. 85 of 1983 (OHSA) detailed in the following table. Refer to the Construction Handbook for the minimum vertical clearances of power lines at maximum sag and swing.

Section 15 of the Electrical Machinery Regulations of the OHS Act specifies the minimum clearances between bare conductors and other conductors and objects. This is the minimum distance that must be maintained in all conditions up to a conductor temperature of 50 degrees centigrade and wind pressure of 500Pa. It is assumed that the lower conductor is at ambient temperature during design to establish this clearance.

Table 1: Minimum clearances for bare OH MV lines

Maximum phase-to-phase voltage (kVrms)	Clearance to ground A- Outside town B- Inside town	Above roads and railway lines	Clearance to communication lines and other power lines	Clearance to buildings and structures not forming part of power lines
1,1 or less	A - 4,9m B - 5,5m	6,1m	0,6m	3,0m
7,2	A - 5,0m B - 5,5m	6,2m	0,7m	3,0m
12	A - 5,1m B - 5,5m	6,3m	0,8m	3,0m
24	A - 5,2m B - 5,5m	6,4m	0,9m	3,0m

MV line crossing an LV line

In the case of a MV line crossing a LV line then the spacing of column 6 of the table should be complied with under the conditions specified. For a 22kV line over a LV line the clearance is thus 900mm

C3.10

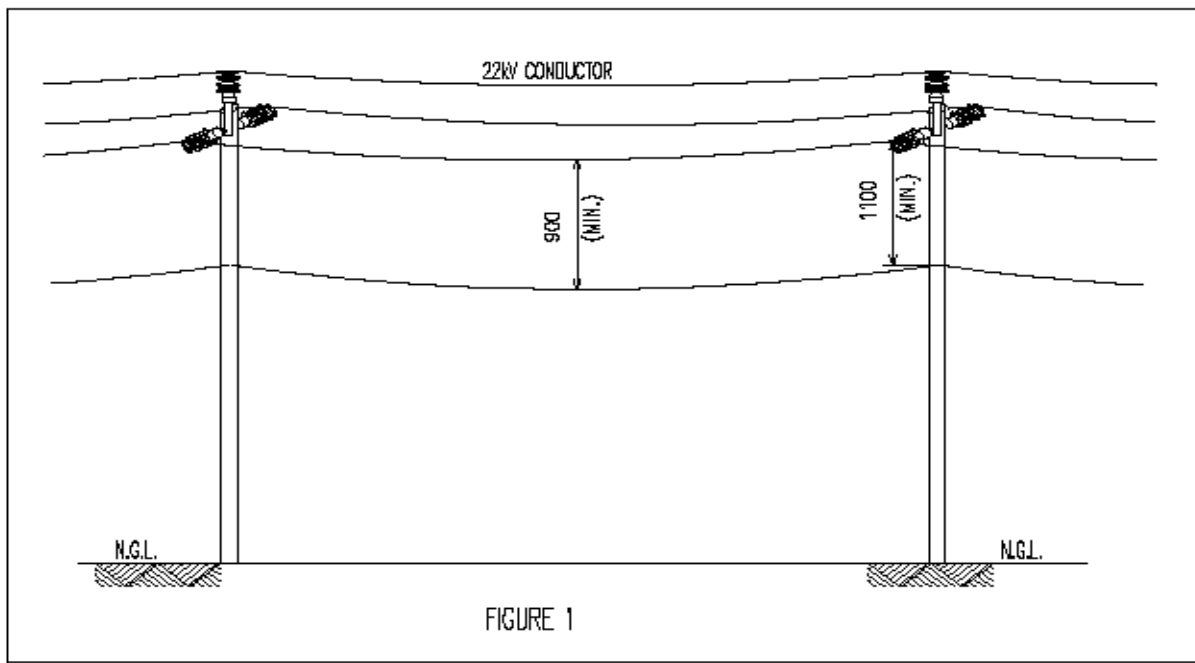
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

minimum. Should however a structure supporting the LV line be beneath the MV lines then the clearance between the **MV conductors** and the **LV structure** should be as per column 7 i.e. 3m. This is to provide a safety distance that will allow work to be carried out on LV equipment on the structure in addition to the minimum safety clearance.

Normal work to be carried out on the power line (e.g. planting/replacing the pole, stringing, tensioning or replacing conductor) will require the isolation and earthing of the MV line in accordance with OPR 6204 (ORHVS) regulation 5.03.

Shared structures

In the case of a set of structures being used to support both MV and LV lines then the clearances in column 6 are used to comply with the Act. For LV conductor running under 22kV conductors on the same structures the minimum clearance to satisfy the Act will be 900mm. The Distribution Standard specifies a minimum spacing between the MV and LV conductors of 1100mm at the attachment point to ensure that the requirement in the Act is met.



Work is able to be carried out on LV equipment on this structure and still maintain the minimum working clearance, e.g. disconnecting, connecting, inspecting or installing a customer service connection, pole top box or streetlight. This is illustrated in figure 1. Normal work to be carried out on the power line (e.g. planting/replacing the pole, stringing, tensioning or replacing conductor) will require the isolation and earthing of the MV line in accordance with OPR 6204 (ORHVS) regulation 5.03.

Semi shared structures

For the case of a LV line running beneath a MV line where the line structures do not all support the MV line then it has been agreed with the Inspector that the spacing as in column 6 will apply. This clearance

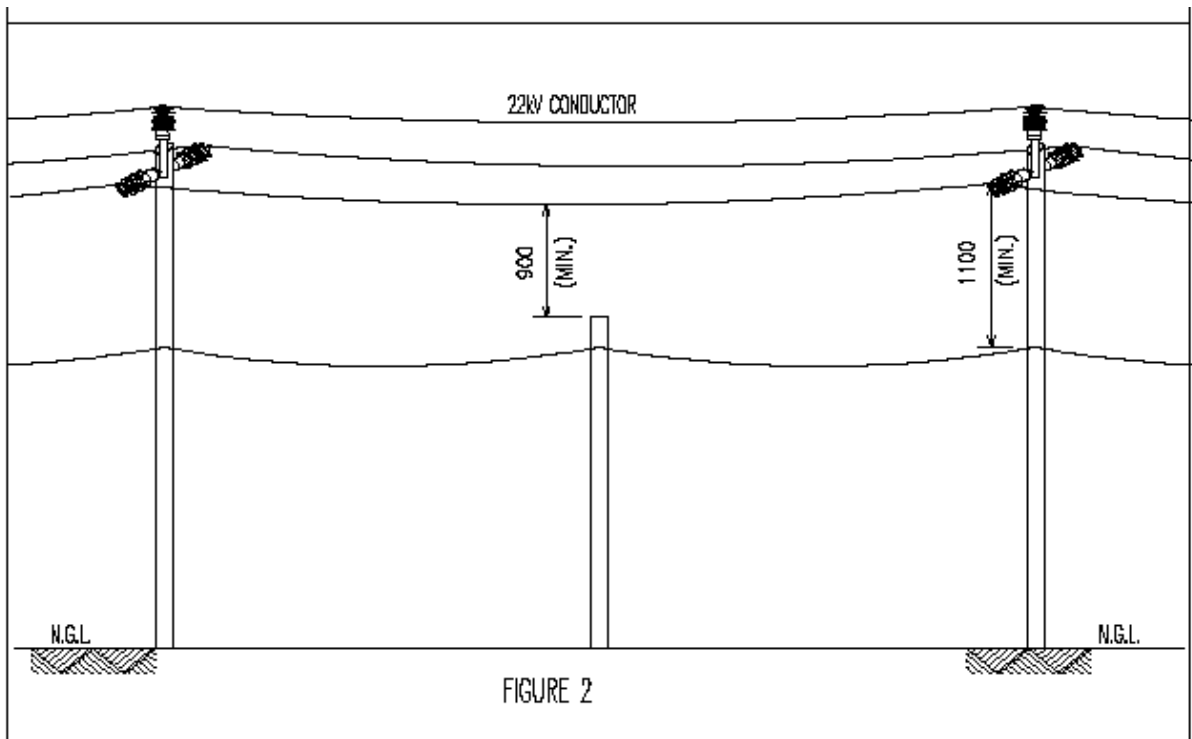
C3.11

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

will apply to the conductors at the common support structures and within the span. At structures only supporting the LV conductors and LV equipment, then the clearance will apply between the MV conductor and the top of the LV structure. Again this clearance is to be the minimum clearance under the case of the MV conductor at 50 degrees centigrade. This is shown in figure 2.

It is further stipulated by the Inspector that, should work be carried on these LV power lines e.g. planting/replacing the pole, stringing, tensioning or replacing conductor, the MV line above the structure should be isolated accordance with OPR 6204 (ORHVS) regulation 5.03. Disconnecting, connecting, inspecting or installing a customer service connection, pole top box or streetlight on this pole will be carried out in the same way as would be done on a shared structure.

It must be noted that this DHO does not intend to restrict work in terms of the standard practices provided for in OPR 6204 (ORHVS) Regulation 5.03.6.3 – Work in close proximity or, OPR 6204 (ORHVS) Section 7 – Live Work. This implies that certain work on the power line (LV or HV) can commence with both systems alive utilizing prescribed live work techniques.



2. CLEARANCES FOR EQUIPMENT MOUNTED ON POWER LINE STRUCTURES

Section 15 is concerned with the safety of people by placing live conductors out of reach. It is not concerned with equipment or performance of the system. It is concerned with the clearances between a live conductor and another circuit's conductor or other places that a person may occupy. It does not apply to conductors of the same power line. It does not cover all possible configurations. It does not apply for clearances to insulated systems such as LV ABC, insulated services or MV cables.

C3.12

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Table 1, column 2 gives a minimum safety clearance for each system voltage. This is the minimum distance to an energised conductor that a person may approach with reasonable safety. There is a reasonable safety margin built into these distances to ensure that there will be a low probability of breakdown of the air between the conductor and a person at this distance.

The determination of clearances for specific cases is based on the determination of an “object” space, which is added to the electrical clearance. As an example the clearances given in column 3, minimum clearance to a power line above ground outside townships, is based on an object space of 4.9m. The object in this case is the largest vehicle that will normally pass under the power line. This 4.9m object clearance is added to the electrical clearance of 0.3m at 22kV to give the 5.2m clearance for a 22kV power line.

Equipment on power line structures

Table 2: Minimum clearance for live terminals of equipment mounted on line structures

MAXIMIM RATED PHASE TO PHASE VOLTAGE	MINIMUM CLEARANCE IN METERS	
1.1 or less	-	3.6
7.2	0.15	3.7
12	0.20	3.9
24	0.32	4.0
36	0.43	4.2

While the height of the power line is specified in the regulations the case of electrical equipment mounted on power line structures is not. The object space for this type of situation and the subsequent overall ground clearance was agreed to with the Inspector. The clearances are given in table 2. This is as per the Department of Manpower reference 34/2/4/1/2 of 5 May 1992.

The clearances given in table 2 are the clearance between the live terminals of the structure-mounted equipment and ground level. Since the equipment that Eskom install on poles does not have bushings at a consistent height from the base of the equipment the Distribution Standard mounting heights have been developed by ensuring that the equipment base is at a height of 4m from ground level.

C3.13

Contractor

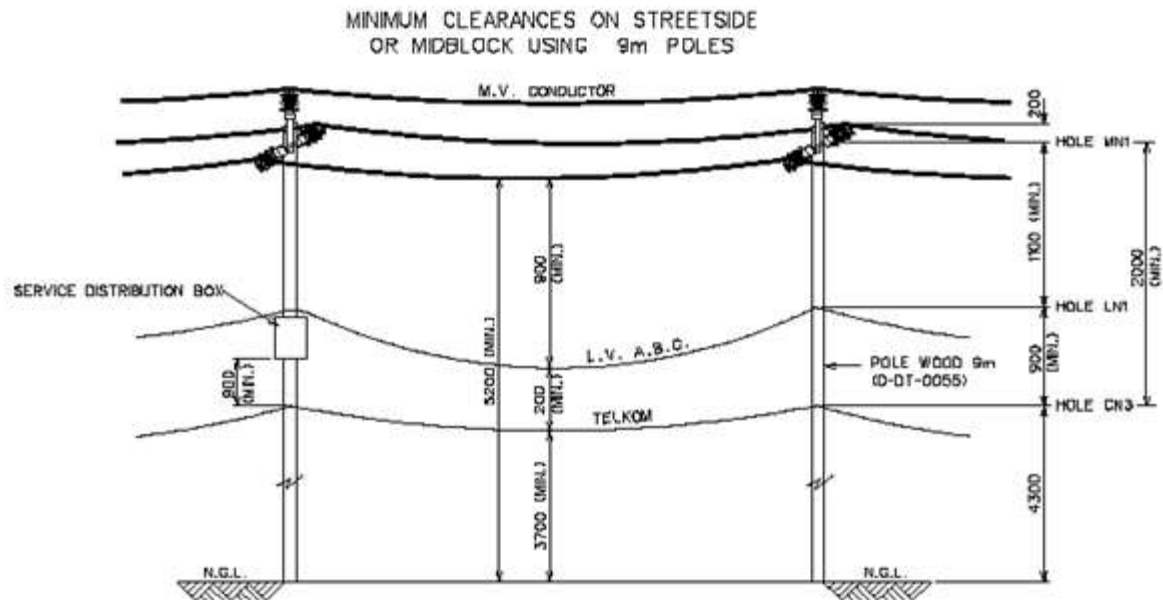
Witness 1

Witness 2

Employer

Witness 1

Witness 2



3. LOW VOLTAGE

- ABC (Without Telkom) ABC (With Telkom)
- a) Main roads : 5,1m : 5,3m
- b) Across roads in townships : 4,7m : 4,9m
- c) Along roads : 3,7m : 3,7m
- d) Across plots : 3,3m : 3,5m

Note that Eskom and Telkom have agreed that a minimum clearance of 1,8m will be provided between bare Eskom power lines above 1,1 kV, and communication lines at crossing points. For exemptions see part 0 of the Distribution Standard.

- Mid-span clearance (Shared services)
 - a) Not less than 0,2m between insulated LV power cables and telecommunication cables.
 - b) Not less than 1,5m between bare MV power conductors and telecommunication cables at the worst condition of sagging.
 - c) Telkom ground clearances
 - over roads : 6,1m
 - along roads in town : 3,6m
 - along roads outside town : 3,0m
- Clearances at attachment points on a structure
 - a) Telkom to ground : 4,3m
 - b) Telkom to low voltage conductor : 0,9m
 - c) Telkom to medium voltage conductor : 1,5m

4 SERVICE CABLES

C3.14

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- a) Main roads : 5,2m
- b) Across roads in townships : 4,7m
- c) Along roads : 3,0m (align with Telkom)
- d) Over private property : 2,5m

C3.1.4 LOCATION OF THE WORKS

The project for the Electrification of Selwane township is located in the Mopani District of Limpopo Province within the jurisdiction of the Ba-Phalaborwa Local Municipality's-ordinates of the project are as follows:

23°41'57.56"S
31° 54' 53.17" E

C3.1.5 TEMPORARY WORKS

Clear the right of way and campsites, in order to erect the necessary site offices, own accommodation facilities, sanitary units, bulk water containers, site store, etc.

The works also include the clean up of site camp and site store, as well as transportation of excess material not used, back to the stores at the completion of the contract.

C3.1.6 LABOUR-INTENSIVE WORKS

All the relevant tasks/works shall be constructed using Labour-Intensive Construction Methods only.

C3.1.7 CONSTRUCTION PROGRAM

It is specifically brought to the notice of the Contractor that time is critical on this project, and the construction period will be a major factor in the award of the tender.

Tenderers shall submit with their tender their **preliminary weekly programme for the construction** of the Works under this contract to suit their proposed method of executing the Works. The programme shall be sufficiently detailed to differentiate between the various activities so that the contract may be properly evaluated.

C3.1.8 CHANGE IN WORKS

C3.15

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

The Engineer may, from time to time by order in writing without in any way vitiating the Contract or giving to the Contractor any claim for additional payment, require the Contractor to proceed with the execution of the works in such order as in his opinion may be necessary, and may alter the order of or suspend any part of the Works at such time and times as he may deem desirable and the Contractor shall not, after receiving such written order, proceed with work ordered to be suspended until he shall receive a written order to do so from the Engineer. Where the work must of necessity be carried out in conjunction with work of other Contractors, or with that of the Employer, it shall be co-ordinated and arranged in such a manner as to interfere as little as possible with the progress of such other work so as to offer every reasonable facility to other Contractors or to employees of the Employer.

C3.1.9 GENERAL INFORMATION

C3.1.9.1 DRAWINGS

The reduced drawings contained in the annexures that form part of the tender document shall be used for tender purposes only. Further drawings are to be provided on an ongoing basis by the engineer. The contractor shall programme his activities to be suitable in terms of his resources to complete the contract inside the stipulated time period.

C3.2 ENGINEERING

C3.16

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.2.1 Design services and activity matrix

- a) The Employer is responsible for the design of permanent Works as reflected in these contract documents unless otherwise stated.
- b) The Contractor is responsible for the design of the temporary Works and compatibility with the permanent Works.
- c) The Contractor shall supply all details necessary to assist the engineer in the compilation of the as built drawings

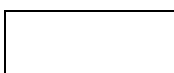
Description	Responsibility
Design of Works	Engineer
Concept, feasibility and overall process	Client
Basic Engineering and detail layouts to tender stage	Engineer
Final Design of Works	Engineer
Final Design to approved for construction stage	Client
Preparation of tender documentation & adverts	Engineer
Appointment of soil test / topographical surveyors	Client
Appointment of sub-contractors	Contractor
Supervision	Engineer
Preparation of as-built drawings	Contractor / Engineer
Completion certificate	Engineer / Client / Contractor

C3.2.2 DRAWINGS

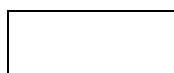
The Engineer will provide the Contractor with one full set of drawings, which will be used exclusively for the recording of as built information by the Contractor. The following drawings are applicable to this contract.

LIST OF DRAWINGS	
ELECTRIFICATION OF 105 UNITS AT GA-SELWANE VILLAGE	
DRAWING NUMBER	DESCRIPTION
SLN/01/01	SELWANE ELECTRICAL RETICULATION SHEEET 1 OF4
SLN/01/02	SELWANE ELECTRICAL RETICULATION SHEEET 2 OF4
SLN/01/03	SELWANE ELECTRICAL RETICULATION SHEEET 3 OF4
SLN/01/04	SELWANE ELECTRICAL RETICULATION SHEEET 4 OF4

C3.17



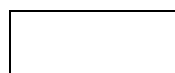
Contractor



Witness 1



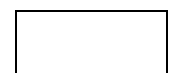
Witness 2



Employer



Witness 1



Witness 2

C3.7 EPWP LABOUR INTENSIVE SPECIFICATION

4.1.1 Labour intensive competencies of supervisory and management staff

Contractors having a CIDB contractor grading designation of 3EP and higher shall only engage supervisory and management staff in labour intensive works who have either completed or are registered for training towards, the skills programme outlined in Table 1.

The managing principal of the contractor, namely, a sole proprietor, the senior partner, the managing director or managing member of a close corporation, as relevant, having a contractor grading designation of 1EP, 2 EP, 3 EP and 4 EP shall have personally completed, or for the period 1 April 2004 to 30 June 2006 be registered on a skills programme for the NQF level 2. All other site supervisory staff in the employ of such contractors must have completed, or for the period 1 April 2004 to 30 June 2006 be registered on a skills programme for, the NQF level 2 unit standards or NQF level 4 unit standards

Table 1: Skills programme for supervisory and management staff

C3.18

<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

Personnel	NQF Level	Unit standard titles	Skills programme description
Team leader / supervisor	1	Apply Labour-Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and } any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	
Foreman/ supervisor	4	Implement Labour-Intensive Construction Systems and Techniques	This unit standard must be completed, and } any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain	
		Roads and Stormwater Drainage Use Labour-Intensive Construction Methods to Construct and Maintain	
		Water and Sanitation Services Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent / Manager (i.e the contractor's most senior representative that is resident on the site)	5	Manage Labour-Intensive Construction Processes	Skills Programme against this single unit standard

C3.19

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4.2.0 Employment of unskilled and semi-skilled workers in labour-intensive works – According to SANS 1914-5.

4.2.1 Requirements for the sourcing and engagement of labour.

1. Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.
2. The rate of pay set for the EPWP per task or per day is as legislated in latest publication.
3. Tasks established by the contractor must be such that:
 - a) the average worker completes 5 tasks per week in 40 hours or less; and
 - b) the weakest worker completes 5 tasks per week in 55 hours or less.
4. The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 3.
5. The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
 - a) where the head of the household has less than a primary school education;
 - b) that has less than one full time person earning an income;
 - c) where subsistence agriculture is the source of income.
 - d) those that are not in receipt of any social security pension income
6. The Contractor shall endeavours to ensure that the expenditure on the employment of temporary workers is in the following proportions:

4.2.2 Specific provisions pertaining to SANS 1914-5

1. Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

2. Contract participation goals

- a) The target participation goal for this Contract shall be a minimum of:
The contract participation goal shall be measured to these requirements.
- b) The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

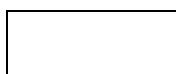
3. Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

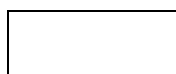
4. Variations to SANS 1914-5

- a) The definition for net amount shall be amended as follows:
Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

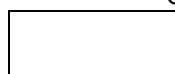
C3.20



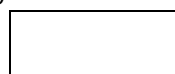
Contractor



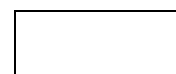
Witness 1



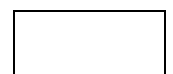
Witness 2



Employer



Witness 1



Witness 2

- b) The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

5. Training of targeted labour

- a) The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.
- b) The cost of the formal training of targeted labour will be funded by the provincial office of the Department of Labour. This training should take place as close to the project site as practically possible. The contractor, must access this training by informing the relevant provincial office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The employer must be furnished with a copy of this request.
- c) A copy of this training request made by the contractor to the DOL provincial office must also be faxed to the EPWP Training Director in the Department of Public Works– Cinderella Makunike, Fax Number 012 328 6820 or email cinderella.makunike@dpw.gov.za Tel: 083 677 4026.
- d) The contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and a minimum of ten (10) days if he she is employed for 4 months or more.
- e) The contractor shall do nothing to dissuade targeted labour from participating in training programmes.
- f) An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training above.
- g) Proof of compliance with the requirements must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

4.3 Certification by recognized bodies – N/A.

4.4 Plant and materials provided by the employer

No material will be supplied by the employer. The contractor must supply all materials and plant.

All materials and plant shall be made available by the Contractor for the execution of the works. All materials used in the Works shall, where such mark has been awarded for a specific type of material, bear the SABS mark.

4.5 Construction Equipment

No equipment will be supplied by the employer. The contractor must supply all equipment and as far as possible, hire equipment from the local community. The contractor's equipment for construction shall be adequate for the purpose required, of modern design and in good condition to carry out the works expeditiously. Should the Engineer be of the opinion that the

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

equipment in use is in any way unsuitable for carrying out the works in a manner or at a rate commensurate with the requirements of the contract, he shall have the right to call on the Contractor at any time during the progress of the works to provide such additional or improved equipment as may be necessary to meet these requirements. The Employer makes no provision in this contract for financial assistance to the Contractor for the acquisition of plant, machinery and equipment.

4.6 Existing Services

A number of existing underground services are on the site, and prior to any excavation work being commenced, it shall be the responsibility of the Contractor to make all the necessary enquiries with the Local Authority to satisfy himself as to the existence or not of any services on the site and to obtain permission to open up any existing services. Any damage to underground or visual overhead services that are shown on the drawings or that have been pointed out by the Engineer or authority in charge of such services, shall be repaired at the contractor's cost. The contractor shall also be liable for any compensation claimed resulting from damage to services that were pointed out to him.

a) Care of Existing Services

It is to be noted that construction work will be done adjacent to or traversing existing services. Prior to commencement of any constructional work in the aforesaid affected area, the Contractor shall satisfy the Engineer that all necessary precautions with respect to setting out procedures have been taken by the Contractor to evade the existing services.

The Contractor shall, before starting any excavations, carefully search and probe the terrain for any existing services or indications of the presence of such services. A payment item is included in the Schedule of Quantities for excavations by hand to locate known and unknown services. If other methods are to be used, the cost thereof is to be included in the Preliminary and General Payment items.

In addition if the proposed new service(s) crosses underneath overhead power lines belonging to Eskom as well as underground pipelines and communication cables belonging to Telkom, the Contractor shall have to comply with all the requirements laid down by the relevant authorities when working in the vicinity thereof. The Contractor shall be responsible for checking the locations of all such services with representative of the relevant authorities to ensure that no damage is caused by construction operations.

Work executed within the road reserve of provincial or local roads shall be carried out strictly in accordance with the requirements laid down by the relevant provincial or local authorities. These include the use of traffic signs, flagmen and other requirements as applicable.

As the above work entails working in or close to an already developed enclosure, special care must be taken so as not to disturb the functioning of the existing facilities.

b) Connection to Existing Services

Prior to connection of new services to existing services, the Contractor shall ensure that the constructed services are clean and free of foreign matter and shall subsequently request the Engineer, in writing, to inspect such Works. Only upon written approval of the Engineer, may connections to existing services be made.

C3.22

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

c) Contractor to Notify Relevant Authority and the Engineer of Damaged Service

In the event of any service being damaged or accidentally disconnected for any reason, the Contractor shall immediately contact the relevant authority for instructions and shall report the occurrence to the Engineer in writing. The report shall include the reasons for the occurrence of the incident. When instructed the damage is to be repaired as soon as possible to the approval of the Engineer and Authority. The Contractor will be held responsible for paying all costs incurred by the Service owner or himself as result of each incident where the relevant service was clearly identified beforehand.

4.7 Site Establishment

a) Contractor's Camp site

The contractor shall provide a suitable site for his camp. The choice of the site for the establishment of the camp, offices and the layout thereof, shall be approved.

The camp site shall be cleared and grubbed and properly fenced with a security fence around the perimeter. The Contractor is to provide his own security at the camp or on the site if required, at his own expense.

After completion of the contract, the Contractor shall remove all his temporary buildings, plant and equipment. The site shall be made good and be left in a neat and tidy condition before a certificate of completion shall be issued.

b) Water Supply

The Contractor shall make his own arrangement for potable and construction water. See Item 4.10 below.

c) Power Supply

The Contractor shall make his own arrangements. The Contractor shall make his own arrangements for the supply of electric power to suit his own and the Engineer's requirements and operations. The cost of providing connections any transformer sub-stations and switch gear, generators fuel and/or overhead power lines or underground cables required to supply the electric power shall be included in the rates entered in the Schedule.

d) Ablution Facilities

The Contractor shall, at each construction area, provide sufficient portable chemical latrine units. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the approval of the engineer.

No separate payment shall be made for this requirement and the costs thereof shall be deemed to be included in the rates billed for the contractor's time-related obligations.

e) Cellular Telephone – See PSAB

It is a requirement of the contract that the contractor shall equip his site agent(s) with a cellular telephone to allow for effective communication between the contractor's supervisory personnel and the engineer's supervisory staff. All costs associated with the provision of cellular telephones for the contractor's personnel shall be deemed to be included in rates billed for time-related charges.

C3.23

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

f) Site Facilities required by the Engineer – See PSAB

Type 1 Office requirements as per PSAB, one site office of approximately 20m² complete with sufficient lighting and power points. Two desks, ten chairs, one conference table and two steel filing cabinets. Two carports for his exclusive use, a net shade cover will suffice. An ablution unit for his exclusive use. The engineer does not require housing for personnel or laboratory facilities.

4.8 Site Usage

The Employer expects the contractor, his staff or agents to maintain good public relations with landowners, other contractors and members of the public at all time.

Access to the site will be arranged by the Employer with the contractor. The Contractor shall submit a list of all his staff to the Employer for the purpose of access control.

4.9 Permits and Wayleaves

The Contractor's staff will require access permits to enter the Site. The Contractor shall give 7 days advance notice to both the Engineer and the property owner of his intention to commence work in a servitude. The Contractor shall not permit his workmen and labourers to use the servitude as a temporary right-of-way and shall carry out the work expeditiously and with minimum inconvenience to the occupiers and to owners of adjacent property.

The Contractor shall take all necessary precautions for the protection of persons livestock, buildings and property. The soil shall be kept segregated and all gardens, fences, paths etc. shall be reinstated to their former condition.

Where acquisition of servitude has not been finalised It may not be possible to obtain continuity of the work. The Contractor will be required temporarily to omit such sections until instructed that the work may proceed.

No extra payment will be made to the Contractor should it be necessary to omit sections and return to them later. It IS not intended, however, that the Contractor should be called upon to return to the Site after all other sections of the Contract have been completed and the Contractor has removed his plant and equipment.

Trees removed in servitude shall remain the property of the stand owners if required by them.

4.10 Water for Construction Purposes

The Contractor shall make provision in his rates for the purchasing of water from local or other sources.

Should water be drawn from a Municipal source, the current tariffs shall be applicable. The Contractor can only draw water from points specified by the Municipality only after written authority has been granted. When permission is granted the water must be drawn through a metered stand-pipe issued by the Water & Sanitation Division.

The Contractor shall cease to operate until other arrangements have been made for the supply of water. No claims for delays so caused will be considered.

4.11 Survey Control and Setting Out of the Works –

C3.24

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The Contractor shall verify at his own cost the accuracy of the pegs or benchmarks pointed out as being available for use to set out the works. Any discrepancies must be reported to the Engineer in writing.

All pegs or benchmarks which are damaged during the Contract which were not in the direct way of the construction of the works shall be replaced by a competent Surveyor (or Land Surveyor if the positions were determined by a Land Surveyor in the first place) at the Contractors own cost.

4.12 Plant and equipment - See Section 4.1.2 – Project Specifications and for the purpose of Labour Intensive approach, are indicated in the SOQ, identified as ‘Li’

C3.8 MANAGEMENT

C3.25

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1. Applicable SANS 1921 standards

The following parts of SANS 1921 Construction works standards and associated specification data are applicable to the works:

- 1) SANS 1921 – 1
- 2) SANS 1921 – 5
- 3) SANS 1921 – 6

The abovementioned South African National Standards make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification

Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies. The associated Specification Data is as follows:

2. Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such book shall be handed to the employer's representative for his signature no later than 12 days after rain that is considered to justify an extension of time occurs according to Standard Condition of Contract Clause 45(3)(b), as follows:

“(b) Abnormal climatic conditions, with the understanding that no extension of the time for completion shall be granted on the grounds of normal rainfall conditions, but extension of time in terms of clause 45.(2) of the General Conditions of Contract, on the grounds of abnormal rainfall or wet conditions, shall be calculated separately for each calendar month or part thereof, according to the following formula:

When the value of V for any month exceeds the number of days in the particular month, V will be them number of days in the month. When V is negative and its absolute value exceeds Nn , then V shall be taken as equal to the negative of Nn .

The symbols shall have the following meanings:

- V = Extension of time in calendar days for the calendar month under consideration.
- Nw = Actual number of days in the calendar month on which a rainfall of Y mm or more were recorded.
- Nn = Average number of days, derived from existing rainfall records, on which a rainfall of Y mm or more were recorded for the calendar month.
- Rw = Actual rainfall in mm recorded on the Site in an approved rain gauge for the calendar month under consideration.
- Rn = Average rainfall in mm for the calendar month, derived from existing rainfall records.
- Y = Daily rainfall base value in mm. (Refer to PS 12).
- X = Average number of days per year with daily rainfall exceeding Y mm.

(Refer to PS 12).

For the purposes of the contract Nn , Rn , X and Y shall have the values stipulated in the Project Specifications.

The total extension of time is the algebraic sum of the monthly totals for the period concerned.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Extension of time for parts of a month shall be calculated by using pro rata values of Nn and Rn . If the algebraic sum of the monthly totals is negative, no reduction of the time for completion as a result of rainfall shall be applicable.

This formula does not take into consideration any delays as a result of flood damage which may cause further or simultaneous delays, and flood damage shall be treated separately for the purposes of extension of time for completion. The factor $(Nw - Nn)$ is considered as a fair allowance for deviations from the normal for the number of days on which the rainfall exceeds Y mm. The factor $(Rw - Rn)/X$ is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall does not exceed Y mm, but on which wet conditions will hamper or disrupt work.

g) Unauthorized persons

The Contractor shall keep NO unauthorized persons from the works at all times, and Under no circumstances may any person except guards be allowed to sleep on the building site. The Contractor to keep a "Site Visitor's Register" and steps to be taken to ensure that all visitors (all persons who is not Contractor's regular employee) register before entering the site. Sign to be provided to direct all visitors to Site Office.

h) Management meetings

There will be scheduled monthly site progress meetings, which all parties to Contract must attend. The meeting will be conducted by the Engineer. The Contractor will be required to submit his progress and forecast progress for the project during this meeting as well as his achievements of the preferential project goals. The Project Labour, Plant and equipment, all site incidents and events to be reported. The Community to be represented by Project Steering Committee (PSC) and the Community Liaison Office (CLO).

i) Electronic payments

The Contractor to provide all his banking details when requested for the purpose of Electronic payments when as when necessary.

j) Daily records

Daily records of resources (equipment and people employed) must be kept and must be available on site at all times. These records will include i.e. site instruction book, site diary, site visit register, contractual documentation and minutes of all project meetings. Labour information should be kept updated at all times.

k) Payment certificates

Monthly progress payment certificate shall be submitted to the Engineer's Representative on site on the last day of the calendar month in which the work was done to allow for reconciliation of all quantities, rates, extensions and additions in the certificate. Upon approval by the Engineer's Representative, the certificate shall be submitted in typed Form to the Engineer before or on the 20th of each month following the month of measurement, together with the required number of copies, for certification. It will be assumed that the Contractor has made adequate provision in the prices tendered for manufacture/supply, delivery, assembly and commissioning all necessary aids required to execute the contract.

C3.27

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The certificates shall be according to the standard format included in the annexure to these specifications.

Where day works have been instructed by the Engineer, the Contractor shall submit the returns to the Engineer for signature and approval within twenty-four (24) hours of the end of the working day on which the work was executed. Day work returns shall be submitted on forms included in the annexure to the Specifications.

l) Permits – N/A

m) Proof of compliance with the law

The Contractor shall, in performance of the Contract, comply with all applicable laws, regulations and statutory provisions and agreements, and shall in particular, on the request of the Engineer, provide proof that he has complied therewith with regard to amongst others:

- ✓ Wages and conditions of work; and
- ✓ Safety

C3.7

HEALTH AND SAFETY

▪ Health & Safety Issues

All work is to be carried out in accordance with the Occupational Health and Safety Act and Regulations (Act 85 of 1993) (a copy of which must be kept on site), the Explosive Material Act of (Act 26 of 1956), the Minerals Act of 1991, and the Factories Machinery and Building Work Act (No 22 of 1941).

The Contractor's notice is drawn to the stipulations of the Construction Regulations 2003, a regulation of the Health and Safety Act 1993 (Gov Notice No R1010 of 18 July 2003). The construction regulation will be applied vigorously on the project.

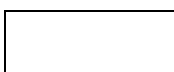
The Contractor to be appointed must have made provision for the cost of health and safety measures during the construction process. The contractor must have the necessary skills, competencies and resources to carry out the work safely. A proper Safety Plan is to be submitted by the Contractor and a copy thereof is to be made available to all applicable appointed labourers and permanent workers on this project.

The Contractor is to ensure that the legal compliance for the Health and Safety issues are in place. Audits will be carried out to ensure that the Contractor is registered and in good standing with the Workmen's Compensation fund and that the Contractor has affected insurance indemnifying the Employer against penalties levied upon the Employer due to the acts of omissions of the Contractor in failing to comply with the provisions of the OHS regulations 2003. A compliance audit will also be carried out to ensure that the Contractor has appointed a full-time competent person in writing to deal with the issues of the OHS and that a risk assessment has been conducted and a copy of the Safety plan is on site before any work commences.

Operational audits will be carried out on the following important issues:

- ✓ That the Safety Plan is on site at all times
- ✓ That the Contractor's Safety file is on site at all times
- ✓ That the Safety Officer is on site at all times
- ✓ That Safety meetings are conducted as per the Safety Plan
- ✓ That employees are working under safe conditions

C3.28



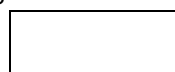
Contractor



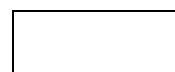
Witness 1



Witness 2



Employer



Witness 1



Witness 2

- ✓ That the public is not placed in danger
- ✓ That there is no harm to the environment

▪ Accommodation of traffic

It is expected of the Contractor to ensure that the free flow of traffic is possible throughout the construction period.

The Contractor is to provide all necessary barricades, signs and lighting in accordance with the stipulations of the South African Road Signs Traffic Manual, and the Protective Services of the Ba-Phalaborwa Local Municipality. All work is to be to the satisfaction of the Engineer.

▪ Reporting of accidents

In addition to any statutory regulations, the Contractor shall, as soon as practicable, report to the Engineer every occurrence on the Works or the site causing damage to property of injury of death of persons. If required by the Engineer, the Contractor will submit a report in writing to the Engineer within 48 hours of such requirement setting out full details of the occurrence. The Engineer shall have the right to make any enquiries either on the site or elsewhere as to the cause and results any such occurrence and the Contractor shall make available to the Engineer the necessary facilities for carrying out such enquiries.

ADDITIONS TO SCOPE OF WORK

As much as is economically feasible all work shall be implemented by employing Labour Intensive Construction methods. Over and above the normal Building and Allied works to be implemented by employing skilled and unskilled labour the works specified in the “Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)” shall be undertaken using Labour Intensive Construction methods.

Employer’s objectives

The employer’s objectives are to deliver public infrastructure using labour intensive methods.

Labour-intensive works

Labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work.

Labour Intensive Competencies of Supervisory and Management Staff

Contractors having a CIDB contractor grading designation of 4EP and higher shall only engage supervisory and management staff in labour intensive works who have either completed the skills programme outlined in Table 1.

The managing principal of the contractor, namely, a sole proprietor, the senior partner, the managing director or managing member of a close corporation, as relevant, having a contractor grading designation of 1EP, 2EP, 3EP and 4EP shall have personally completed a skills programme for the NQF level 2. All other site supervisory staff in the employ of such contractors

C3.29

[Signature box]

Contractor

[Signature box]

Witness 1

[Signature box]

Witness 2

[Signature box]

Employer

[Signature box]

Witness 1



[Signature box]

Witness 2

must have completed a skills programme for, the NQF level 2 unit standards or NQF level 4 unit standards.

The Employer may set other conditions at their discretion which must be complied to when engaging Contractors who do not comply with is provision.

Table 1: Skills programme for supervisory and management staff

Personnel	NQF Level	Unit standard titles	Skills programme description
Team leader / supervisor	1	Apply Labour-Intensive Construction Systems and Techniques to Work Activities	 any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	
Foreman/ supervisor	4	Implement Labour-Intensive Construction Systems and Techniques	 any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain	
		Roads and Stormwater Drainage Use Labour-Intensive Construction Methods to Construct and Maintain	
		Water and Sanitation Services Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent / Manager (i.e the contractor's most senior representative that is resident on the site)	5	Manage Labour-Intensive Construction Processes	Skills Programme against this single unit standard

C3.30

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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1. Employment of Unskilled and Semi-Skilled Workers in Labour-Intensive Works

1.1 Requirements for the sourcing and engagement of labour.

1.1.1 Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

1.1.2 The rate of pay set for the EPWP per task or per day is as legislated in latest publication

1.1.3 Tasks established by the contractor must be such that:

- a) the average worker completes 5 tasks per week in 40 hours or less; and
- b) the weakest worker completes 5 tasks per week in 55 hours or less.

1.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.1.3.

1.1.5 The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

- a) where the head of the household has less than a primary school education;
- b) that have less than one full time person earning an income;
- c) where subsistence agriculture is the source of income.
- d) those who are not in receipt of any social security pension income

1.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:

- a) 60% women;
- b) 60% youth who are between the ages of 18 and 35; and
- c) 2% on persons with disabilities.

1.2 Specific provisions pertaining to SANS 1914-5

1.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

1.2.2 Contract participation goals

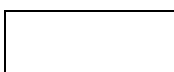
1.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.

1.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

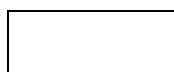
1.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

C3.31



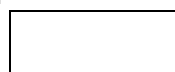
Contractor



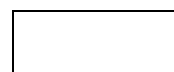
Witness 1



Witness 2



Employer



Witness 1



Witness 2

1.2.3 Variations to SANS 1914-5

1.2.4.1 The definition for net amount shall be amended as follows: Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

1.2.4.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

1.3 Training of targeted labour

1.3.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.

1.3.2 The cost of the formal training of targeted labour will be funded by the provincial office of the Department of Labour. This training should take place as close to the project site as practically possible. The contractor, must access this training by informing the relevant provincial office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The employer must be furnished with a copy of this request.

1.3.3 A copy of this training request made by the contractor to the DOL provincial office must also be faxed to the EPWP Training Director in the Department of Public Works– Cinderella Makunike, Fax Number 012 328 6820 or email cinderella.makunike@dpw.gov.za Tel: 083 677 4026.

1.3.4 The contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and a minimum of ten (10) days if he she is employed for 4 months or more.

1.3.5 The contractors shall do nothing to dissuade targeted labour from participating in the above mentioned training programmes.

1.3.6 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 1.3.4 above.

1.3.7 Proof of compliance with the requirements of 1.3.2 to 1.3.6 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

C3.32

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PROJECT SPECIFICATIONS

C3.2 PART B: MATTERS RELATING TO THE STANDARD SPECIFICATIONS

B1 PROJECT SPECIFICATIONS REFERRING TO THE STANDARD SPECIFICATIONS AND ADDITIONAL SPECIFICATIONS

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

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

B2 SECTION 1100: DEFINITIONS AND TERMS

B1156 LABOUR-OPTIMISING CONSTRUCTION

ADD THE FOLLOWING NEW CLAUSE:

The cost effective employment of as great a portion of labour as is practically and technically feasible to produce a standard of construction as required by the Specifications, thus the economic substitution of plant and mechanical equipment in favour of available labour using hand tools, on condition that this method is not more expensive than the conventional construction practices.

The number of each payment item in the schedule of quantities for the above clause will consist of the Prefix L1 forward by a number corresponding to the number of the relevant Clause or Payment Item in the Standard Specifications.

B3. SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS

B1202 SERVICES

ADD THE FOLLOWING NEW PARAGRAPH:

“Before work commences”, the Contractor if required, shall contact all private owners or public authorities controlling services to allow them to protect, move or relocate a service as required, or to confirm that all such work has been completed.

No payment will be made for inconvenience to the contractor due to services crossing the site or any authority working on such services, nor will delays caused by such workings be accepted as a basis for claiming an extension of time for completing the works”.

B1204 PROGRAMME OF WORK

C3.33

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(a) General requirements

Amend the word “network” in the fourth line of the first paragraph to read as “bar (Gantt) chart”.
Add the following after the third paragraph:

“The bar-chart programme to be provided by the contractor shall show the various activities in such detail as may be required by the engineer. Progress in terms of the programme shall be updated monthly by the contractor in accordance with the progress made by the contractor.

In compiling the programme of work, the contractor shall indicate and make due allowance for the following, as specified elsewhere in the contract documents:

The requirements regarding the accommodation of traffic and areas that may be occupied at any time for construction purposes (as indicated on the drawings and specified in Section 1500 of the specifications)

Requirements regarding the training of labourers and Emerging Contractors (EC’s).The requirements for work to be undertaken by labourers and work to be undertaken by EC’s.

(b) Programme of work for rehabilitation work

Amend the word “network” in the fourth line of the second paragraph to read as “bar (Gantt) chart”.

B1205 WORKMANSHIP AND QUALITY CONTROL

Add the following to the third paragraph:

“The engineer shall, however, undertake acceptance control tests for the judgement of workmanship and quality, without accepting any obligations vested with the contractor in terms of the contract with specific reference to quality of materials and workmanship. Such acceptance control test done by the engineer shall not relieve the contractor of his obligations to maintaining his own quality control system.”

Add the following at the end of this clause:

"The engineer shall, for the purpose of acceptance control on products and workmanship, assess test results and measurements in accordance with the provisions of section 8300 of the standard specifications. Where small quantities of work are involved, a lot shall mean a full day's production for a specific item of work subject to acceptance control testing."

B1206 THE SETTING-OUT OF THE WORK AND PROTECTION OF BEACONS

Add the following:

“The contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith.”

The Contractor shall take care that property beacons, trigonometrically survey beacons or setting-out beacons are not displaced or destroyed without the consent of the Engineer. Property beacons and trigonometrical survey beacons that have been displaced or destroyed shall be replaced by a registered land surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the Contract without the consent of the Engineer shall be borne by the Contractor.”

B1209 PAYMENT

(b) Rates to be inclusive

C3.34

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Add the following:

“VAT shall be excluded from the rates and provided for as a lump sum in the Summary of Bill of Quantities”.

(e) Materials on the site

Add the following:

"In addition, the engineer may at his sole discretion also allow payments under "Materials on Site" in respect of any construction materials if stored off-site providing that:

- (a) The site selected for this purpose is approved by the engineer
- (b) Such land is physically separated from any production plant or operation
- (c) Only materials for use under this contract is stockpiled on such land
- (d) The contractor has provided proof of an agreement with the owner of such land that the owner has no claim whatsoever on any materials stockpiled on such land
- (e) Materials obtained by the contractor for or on behalf of emerging subcontractors (SMME's) shall remain the responsibility of the contractor after payment has been made in respect of materials on site."

B1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

Add the following after the first paragraph of this clause:

"For the purposes of this contract, extension of time resulting from abnormal rainfall or other forms of inclement weather shall be determined according to the requirements of Method ii (critical-path method)."

Method (ii) (Critical path method)

Delete "(based on a five-day working week)" in the fifth and sixth lines of the second paragraph of the description of this method.

Delete the last sentence of the second paragraph of the description of this method and replace with the following:

"The value of "n" shall be taken as **per table 1 below, depending on the month of the event.** per calendar month.

If normal rainy or inclement weather, resulting in delays, occurs for less than **n-value** in any calendar month, the difference between the **n-value** and the actual number of working days on which normal rainy or inclement weather occurred, shall be ignored and not accumulated for the duration of the contract period for the purposes of determining an extension of time due to normal rainy weather, nor due to any other reason.

Items of work on the critical path of the programme of work which are subject to climatic limitations, shall also be considered for extension of time if such items of work are delayed by e.g. cold weather, high winds or other inclement weather conditions.

In this regard, reference shall be made to weather limitations specified for the application of various bituminous products. However, for months during which seal-work cannot be undertaken in terms of the specifications, no extension of time shall be claimed for.

C3.35

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Table 1 – RAINFALL RECORDS FOR PERIOD: 2006– 2016

RAINFALL STATION: Phalaborwa Lat: -24.1770 Lon: +30.8350 Height 370 m

Average No of Days with Rainfall exceeding 10mm: 6.6 days/year

Average Rainfall: 447.8 mm/year station no: 06376113

MON	AVE	ST	N DAY	NUM	1	5.1	10.1	20.1	50.1	100.1	MAX R	MAX RAIN
MON		DEV	RAIN	MON	5	10	20	50	100	900	DAY	DATE
MON	AVE	ST	N DAY	NUM	1	5.1	10.1	20.1	50.1	100.1	MAX R	MAX RAIN
MON		DEV	RAIN	MON	5	10	20	50	100	900	DAY	DATE
JAN	104.6	73.8	6.3	11	2.2	1.3	1	0.8	0.2	0.3	202	1/17/2012
FEB	45.8	55.3	3.7	11	1.5	0.5	0.5	0.5	0.2	0	70.5	2/25/2006
MAR	65	107.9	4.4	11	1.8	0.5	0.3	0.6	0.1	0.2	182.5	3/4/2014
APR	45.4	47.2	4	11	1.5	0.8	0.5	0.4	0.3	0	69	4/20/2013
MAY	7.6	11.7	1.2	11	0.8	0.1	0	0.2	0	0	30	5/7/2009
JUN	0.5	1.7	0.2	11	0	0.1	0	0	0	0	6	6/10/2009
JUL	4.2	10.2	0.6	11	0.2	0.1	0.1	0.1	0	0	25	7/3/2007
AUG	1.6	3.3	0.6	11	0.2	0.2	0	0	0	0	10	8/14/2011
SEP	7.7	10.9	1	11	0.3	0.5	0.2	0	0	0	17.5	9/28/2007
OCT	27.1	26.6	3.7	11	1.7	0.6	0.5	0.4	0	0	38.5	10/11/2012
NOV	57.7	28.5	6.3	11	2.2	0.9	1.3	0.6	0.2	0	60	11/12/2009
DEC	80.5	52.6	6.8	11	2.1	1.2	1.6	0.8	0.3	0	78	12/15/2011
YR	447.8		38.8		14.4	6.6	6	4.5	1.2	0.5	YR	

SOURCE OF INFORMATION: South African Weather Service, Private Bag X097, Pretoria, 0001

- Nw = Actual number of days during calendar month on which a rainfall of 10 mm or more is recorded.*
- Nn = Average number of days in the calendar month concerned on which a rainfall of 10 mm or more is recorded in terms of existing rainfall data.*
- Rw = Actual rainfall for the calendar month concerned in mm.*
- Rn = Average rainfall for the calendar month in mm deduced from existing rainfall data.*

C3.36

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

B1217 PROTECTION OF THE WORKS AND REQUIREMENTS TO BE MET BEFORE CONSTRUCTION OF NEW WORK ON TOP OF COMPLETED WORK IS COMMENCED

Add the following subclause:

"(h) No concrete paving block directly adjoining the concrete kerbs and concrete side drains shall be constructed prior to the completion of the concrete kerbs and concrete side drains."

B1207 NOTICES, SIGNS AND ADVERTISEMENTS

REPLACE THE FOURTH PARAGRAPH WITH THE FOLLOWING:

"The sign-boards shall be painted with the legend in English".

B1227: MONTHLY SITE MEETINGS

ADD THE FOLLOWING:

The Contractor or his authorized representative attending these meetings shall be a person who is empowered to take contractually binding decisions.

B1228: LEGAL PROVISIONS

ADD THE FOLLOWING NEW PARAGRAPHS:

"The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2003 as promulgated in Government Gazette No 25207 and Regulation Gazette No 7721 of 18 July 2003. Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the works.

The proposed type of work, materials to be used and hazards likely to be encountered on this Contract, and which cover the Employers' health and safety specifications (subclause 4(1) of the regulations, are detailed in the Project Specifications, Schedule of Quantity and Drawings.

The Contractor shall in terms of subclause 5(1) provide a comprehensive health and safety plan detailing his proposed compliance with the regulations, for approval by the Employer.

The Contractor shall at all times be responsible for full compliance with the approved plan as well as the Construction Regulations.

No extra over or additional payment shall be made to compensate the Contractor for compliance with these Regulations, and compensation shall be included in the rates tendered for the applicable items of work."

B1229: CEMENT

Where reference is made in this specification or the Standard Specifications to the cement specifications, e.g. SABS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification:

SABS EN 197-1: Cement-composition, specifications and conformity criteria Part 1: Common cements.

SABS EN 197-1: Cement-composition, specifications and conformity criteria Part 1: Common cements.

C3.37

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

CEMENT TYPE	CEM 1			CEM II A - M	CEM II A - S	CEM II B - S	CEM II A - L	CEM II A - V	CEM II B - V	CEM III A
CEMENT GRADE	52,5	42,5R	42,5				32,5			
Alpha	Rapid Hard	-	Portland Cement	-	-	-	All Purpose Cement	All Purpose Cement	Building Cement	-
Alpha Swaziland	-	-	-	-	-	-	-	-	Multi Purpose Cement	-
Lafarge	Duracast	-	Duratech	Powercrete	-	-	-	-	Buildcrete 32,5	-
NPC	-	Eagle Super	-	-	Eagle Plus/ Premium	Eagle Plus	-	-	-	Eagle Pro
PPC	Rapo	Rapo	OPC	-	-	-	Surebuild	Surebuild	Surecrete	-
PPC Botswana	-	-	-	-	-	-	-	Surebuild	Botcern	-
Slagment	-	-	-	-	-	-	-	-	-	Geotech 50*

* This product is intended for road stabilisation purposes only. It is generally only available in bulk.

** Note that all products listed above bear the SABS mark. Information correct in October 2001.

B1230: COMMUNITY LIASON OFFICER (CLO)

The Contractor or his appointed agent will appoint a Community Liaison Officer (CLO) after consultation with the Project Co-ordinating Committee, the Engineer and the Employer. The Contractor shall direct all his liaison efforts with the local communities through the appointed officer. The Contractor shall, however, accept the appointed officer as part of his management personnel.

(a) Duties of the Community Liaison Officer

The Community Liaison Officer's duties will be:

- (i) To be available on site daily between the hours of 07:15 and 10:30 and at other times as the need arises. His normal working day will extend from 07:15 in the morning until 15:15 in the afternoon.
- (ii) To determine, in consultation with the Contractor, the needs of the temporary labour for relevant skills training. He will be responsible for the identification of suitable trainees and will attend one of each of the training sessions.
- (iii) To communicate daily with the Contractor and the Engineer to determine the labour requirements with regard to numbers and skill, to facilitate in labour disputes and to assist in their resolution.
- (iv) To assist in and facilitate in the recruitment of suitable temporary labour and the establishment of a "labour desk".
- (v) To attend all meetings in which the community and/or labour are present or are required to be represented.

C3.38

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (vi) To assist in the identification, and screening of labourers from the community in accordance with the Contractor's requirements.
- (vii) To inform temporary labour of their conditions of temporary employment and to inform temporary labourers as early as possible when their period of employment will be terminated.
- (viii) To attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- (ix) To keep a daily written record of his interviews and community liaison.
- (x) To attend monthly site meetings to report on labour and RDP matters.
- (xi) All such other duties as agreed upon between all parties concerned.

(b) Period of employment of the Community Liaison Officer

The period of employment of the Community Liaison Officer shall be as decided upon jointly by the Contractor, Engineer and Employer.

B1231 MEASUREMENT AND PAYMENT

"ADD NEW ITEMS"

1200: General Requirements and Provisions

B1201 (i) Payment of Community Liaison Officer Provisional Sum (Prov. Sum)

(ii) Handling costs and profit in respect of 12.01(i) above Percentage (%)

The provisional sum allowed in Item (i) for the payment of the Community Liaison Officer and the percentage allowed under Item B1201 (ii) shall include full commission for all obligations, overheads, administration charges and incidental Items of cost necessary.

B1202 Structured training (as specified in Part D of the Project Specifications)

(a) Generic Skills Provisional Sum (Prov Sum)

(b) Entrepreneurial Skills Provisional Sum (Prov Sum)

(c) Handling Costs and profit in respect of Sub-item (a) and (b) above Percentage (%)

(d) Provision of training venue (only if required) Lump Sum (L/S)

The Provisional Sum and Lump Sum allowed in item (a), (b) and (d) respectively for the payment of structured training, and percentage allowed under Item (c) shall include full commission for all obligation, overheads, administration charges and incidental items of cost necessary.

B4. SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B 1301: SCOPE

C3.39

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ADD "as well as all costs related to conforming to the requirements of the Construction Regulations, 2003" AFTER "It also covers" IN THE FOURTH LINE...

B5. SECTION 1400: HOUSING, OFFICES AND LABORATORY FOR THE ENGINEER'S SITE PERSONNEL

B1402: OFFICES AND LABORATORIES

(a) General

ADD THE FOLLOWING:

"All offices and laboratories shall be supplied with approved burglar proofing"

ADD THE FOLLOWING SUB-CLAUSE:

"(h) Telecommunication System

One (1) cellular phone shall be provided for the use of the Engineer and his staff. The system shall be compatible with an existing system in the area. On completion of the contract the cellular phone will be returned to the contractor".

"Item **Unit**

B14.11 Telecommunication System Supply

- (a) Supply one (1) cellular phone Lump Sum (L/S)**
- (b) Monthly Rental Month**
- (c) Cost of calls by Engineer Prime Cost Sum (PC Sum)**
- (d) Handling cost and profit in respect of sub-clause 14.11(b) & (c) above... Perc (%)**

The tendered rates shall include full compensation for the supply of units. The rates shall include for all costs of any agreement with the Cellular Services used. The cost of the calls will be paid on invoice from the Cellular Services and also the tendered rates for sub-item B14.11 (d) shall include full commission for all obligation, overheads, administration charges and incidental items of cost necessary.

B1403 HOUSING

(c) Rented Accommodation

REPLACE THE FULL STOP AT THE END OF THE FIRST SENTENCE OF SUB-SUBCLAUSE (c) (ii) WITH A COMMA AND ADD "and for all services connected with such accommodation".

B1404 SERVICES

ADD THE FOLLOWING SUB-CLAUSE

"(e) Testing of materials

The Contractor shall arrange with an approved laboratory to carry out sufficient tests on a regular basis as agreed between him and the Engineer to determine whether the degree of compaction, and, where applicable, the quality of materials used, comply with the specifications and shall submit the results of these tests to the Engineer in a form of approved by him".

B6. SECTION 1500 : ACCOMMODATION OF TRAFFIC

C3.40

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B 1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

ADD THE FOLLOWING AFTER THE FIRST PARAGRAPH:

"All temporary road signs, devices, sequences, layouts and spacing shall comply with the requirements of the Road Traffic Act, 1996 (Act 93 of 1996), the National Road Traffic Regulations, 2000, the South African Road Traffic Signs Manual, the requirements of the relevant road authority and the drawings. All temporary traffic control facilities shall also comply with the guidelines set in SA Road Traffic Signs Manual, Volume 2, and Chapter 13: Roadworks Signing, (SARTSM, June 1999, obtainable from the Government Printer, Pretoria)".

(c) Channelization devices and barricades

ADD THE FOLLOWING:

"Drums shall not be used as channelization devices.

TW 401 and TW 402 delineators shall comply with the following requirements:

- (i) It shall be manufactured from a flexible material and shall comply with SABS 1555. The blade portion of the delineator shall be positively affixed to a base unit which in turn shall be stable on its own or be stabilized by means of sandbags when used on the road.
- (ii) The blade shall be retro-reflectorized, with class I yellow sheeting on the side facing oncoming traffic.
- (iii) It shall be nominally 1 000 mm high x 250 mm wide and the bottom edge of the delineator shall not be more than 200 mm above the road surface.
- (iv) It shall be subject to the approval of the Engineer.

The maximum spacing between centres of delineators shall be as shown on the Drawings or as directed by the Engineer."

ADD THE FOLLOWING CLAUSE:

"B 1518 RETRO-REFLECTIVE MATERIAL

Retro-reflective material for temporary signs shall comply with the requirements of SABS 1519-1 for weathered material. Tests shall be carried out with a field retro-reflectometer and the testing procedure and classification are described in Clause B 8118. The values of the Coefficient of Retro-Reflection shall be at least 60% of the values indicated in Table B8118/1."

B7. SECTION 1700: CLEARING AND GRUBBING

B1703 EXECUTION OF WORK

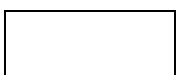
(a) Areas to be cleared and grubbed

DELETE "normally" IN THE SECOND PARAGRAPH.

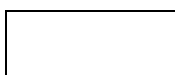
B8. SECTION 1800 : DAYWORK SCHEDULE

Note: This is a new section added to the Standard Specifications.

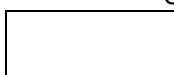
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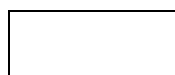
Contractor



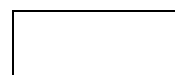
Witness 1



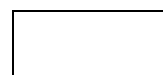
Witness 2



Employer



Witness 1



Witness 2

ADD THE FOLLOWING:

B1801 SCOPE

This section covers the listing of daywork items for use in determining payment for work which cannot be quantified in specific pay item "units" in the bill of quantities or work ordered by the engineer during the construction period which was not foreseen at tender stage for which no applicable rate exists in the schedule or for work of a special or different character warranting special payment as decided by the engineer.

B1802 ORDERING OF DAYWORK

No daywork shall be undertaken unless specific written authorisation is obtained from the engineer.

B1803 MEASUREMENT AND PAYMENT

The engineer may order the following daywork items:

ITEM	DESCRIPTION	UNIT
B18.01	Labourers:	
	(i) Unskilled	Hour (h)
	(ii) Semi-skilled	Hour (h)
	(iii) Skilled	Hour (h)
B18.02	Foreman	Hour (h)
B18.03	Tipper trucks:	
	(i) 3 – 5 ton	Hour (h)
	(ii) 5,1 – 10 ton	Hour (h)
B18.04	Loader (0,5m ³)	Hour (h)
B18.05	Grader (CAT 140G	Hour (h)
B18.06	or similar)	Hour (h)
B18.07	LDV	
	Compaction Rollers:	Hour(h)
	(i) Vibrator roller	Hour (h)
	(ii) Tamping roller	Hour(h)
	(iii) Grid roller	Hour(h)
B18.08	(iv) Pneumatic	
	roller	Hour(h)
	Hand Controlled	Hour(h)
	Compactors	Hour(h)
	(i) Pedestrian	Hour(h)
B18.09	roller (Bomag BW90)	Hour(h)
	(ii) Vibratory plate	
	(iii) Rammers	
	Water truck (min	
	10000 l)	

C3.42

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The unit of measurement shall be the actual number of hours worked by labourers or foremen or an item of plant.

The tendered rates shall include full compensation for all cost items including overheads, head-office expenses and profits as described in subclause 40(3) of the general conditions of contract and shall be subject to contract price adjustment as provided for in the contract.

The mark-ups on daywork items in accordance with the Appendix to the Tender shall not be applicable on daywork items listed in the bill of quantities in terms of the above specifications. In the event of new daywork rates being requested for items not appearing in the bill of quantities, then the provisions of the general conditions of contract and the Appendix to the Tender shall apply.

Prior to the commencement of any work by the labourers described under item B18.01, the contractor must obtain written consent from the engineer regarding the classification and composition of all labourers in terms of "unskilled" and "skilled" labourers required for the work as ordered by the engineer."

B3104 OPENING AND WORKING BORROW PITS AND HAUL ROADS

(d) Excavating borrow material

ADD THE FOLLOWING:

"The Contractor shall at all times ensure that the removal of the material is carried out in such a manner that the stability of the exposed faces is not prejudiced and safe working conditions are maintained".

B11.SECTION 3300 : MASS EARTHWORKS
B 3307 FILLS

ADD THE FOLLOWING SUB-CLAUSE:

(i) General

"Re-shaping" means performing minor earthworks and grading so that the final cross-section of the road complies with the typical cross-section for the type of road specified and the vertical alignment complies with the information provided by the Engineer.

The Contractor shall supply the Engineer with a full set of cross-sections before commencing any construction activities in the road reserve.

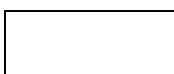
(ii) Earthworks

The re-shaped formation shall be constructed true to line, level and cross-section as shown on the drawings or as directed by the Engineer.

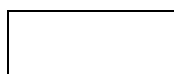
The re-shaping process shall in general be carried out using material obtained from within the road reserve which is moved laterally and placed in the road formation. It is not the intention that material be moved longitudinally along the road over any significant distant during this process.

The Contractor's attention is specifically drawn to the requirement that only material approved by the Engineer may be used to bring the road up to the specified new formation (sub-base) level. To obtain

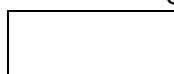
C3.43



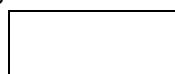
Contractor



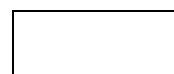
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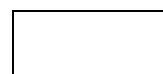
Witness 2



Employer



Witness 1



Witness 2

better material characteristics in the fill, wearing course material from the existing road formation may be mixed with material obtained from the adjacent road reserve

PROJECT SPECIFICATIONS

C 3.3 PART C PROVISION OF THE TEMPORARY WORKFORCE

CONTENTS

C 01	SCOPE
C 02	INTERPRETATIONS
C 03	PERMITTED SOURCES OF TEMPORARY WORKERS
C 04	EMPLOYMENT RECORDS TO BE PROVIDED
C 05	VARIATIONS IN WORKER PRODUCTION RATES
C 06	TRAINING OF THE TEMPORARY WORKFORCE
C 07	RECRUITMENT AND SELECTION PROCEDURES
C 08	TERMS AND CONDITIONS PERTAINING TO THE EMPLOYMENT OF THE TEMPORARY WORKFORCE
C 09	LABOUR RELATIONS AND WORKER GRIEVANCE PROCEDURES
C 10	THE SUBCONTRACTORS' WORKFORCES
C 11	MEASUREMENT AND PAYMENT

C3.44

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C 01 SCOPE

This Specification covers the provisions and requirements relating to the provision of the temporary workforce.

C 02 INTERPRETATIONS

C 02.01 Supporting documents

The Tender Rules, Conditions of Contract, Standard and Project Specifications, Drawings and statutory minimum requirements relating to the employment and remuneration of labour shall *inter alia* be read in conjunction with this Specification.

C 02.02 Definitions and abbreviations

For the purposes of this specification, the definitions given in the Conditions of Contract, the Standard Specifications and the Project Specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

- (a) "Key Personnel" means all contracts managers, site agents, materials and survey technicians, trainers, supervisors, foremen, skilled plant operators, artisans and the like, and all other personnel in the permanent employ of the Contractor or Subcontractor who possess special skills and/or who play key roles in the Contractor's or Subcontractor's operation
- (b) "Project Committee" means a committee consisting of the Employer, the Engineer, the Contractor, (or their nominated representatives) as well as representatives of the temporary workforce, which is convened from time to time at the discretion of the Engineer, for the purposes of acting as an avenue for effective communication and liaison between all the parties referred to, in all matters pertaining to the Contract
- (c) "Subcontractor" means any person or group of persons in association, or firm, or body corporate (whether formally constituted or otherwise) not being the Contractor, to whom specific portions or aspects of the Works are sublet or subcontracted by the Contractor in accordance with the provisions of the Contract
- (d) "Worker" for the purposes of this Specification means any person, not being one of the Contractor's key personnel, nor any key personnel of any Subcontractor, who is engaged by the Contractor, a Subcontractor or the Employer to participate in the execution of any part of the Contract Works and shall include unskilled labour, semi-skilled and skilled labour, clerical workers and the like
- (e) "Workforce" means the aggregate body comprising all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all Subcontractors
- (f) "Liaison Officer" means a representative from the temporary workforce, duly elected by them, to act on their behalf and through whom all matters pertaining to the temporary workforce can be channelized.

C 02.03 Status

Where any provisions or requirements of this Specification are in conflict with anything elsewhere set out in the Contract, the provisions and requirements of this Specification shall take precedence and prevail.

C3.45

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C 03 PERMITTED SOURCES OF TEMPORARY WORKERS

The Contractor shall as far as possible make optimum use of the human resources outside his own workforce and the workforces of all subcontractors. The temporary workforce which is to be used in the execution of the Works in terms of Part A may consist of the workers of various communities, and shall not be bound to one particular community.

C 04 EMPLOYMENT RECORDS TO BE PROVIDED

(a)The Contractor shall maintain accurate and comprehensive records of all workers engaged on the Contract and shall provide the Engineer at monthly intervals from the commencement of the Contract, with interim records substantiating the actual numbers of employment opportunities which have been generated to date and the amounts actually paid in respect thereof. Such interim records shall be in a format approved by the Engineer.

(b)The Contractor shall, on completion of the Contract, and as a pre-requisite event to the release of any retention money in terms of the Conditions of Contract, provide the Engineer with copies of the Terms of Employment as well as independently audited documentary evidence of the total number of temporary and permanent employment opportunities actually generated during the Contract.

C 05 VARIATIONS IN WORKER PRODUCTION RATES

Notwithstanding anything to the contrary as may be stated in or inferred from any other provision of this Contract, the Contractor shall not be entitled to any additional payment or compensation whatever, in respect of any differences as may result between the production rates actually achieved by workers in the course of the execution of the Contract Works and those production rates on which he has based his tender.

C 06 TRAINING OF THE TEMPORARY WORKFORCE

- (a) Selected members of the workforce are to be provided with structured training in accordance with the provisions of Part D.
- (b) The Contractor shall make all necessary allowances in his programme of work to accommodate and facilitate the delivery of such structured training and shall comply fully with the requirements of Part D.
- (c) The provision of structured training as described in Part D shall not relieve the Contractor of any of his obligations in terms of the Conditions of Contract and the Contractor shall remain fully liable for the provision, at his own cost, of all training of the workforce, additional to that as provided for in Part D, as may be necessary to achieve the execution and completion of the works strictly in accordance with the provisions of the Contract.

C 07 RECRUITMENT AND SELECTION PROCEDURES

C 07.01 The Contractor shall be fully responsible for the recruitment and selection of workers to constitute the temporary workforce.

C 07.02 The Contractor shall advise the Engineer in writing of the numbers of each category of temporary worker which he requires, together with the personal attributes which he considers desirable that each category of worker shall possess (taking due cognisance of the provisions of the Contract relating to training).

C3.46

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C 07.03 The Contractor shall, at his own cost, take all necessary actions to advertise within the communities comprising the personnel resources, the fact that temporary employment opportunities exist and the time and place where recruiting will occur.

C 07.04 The Contractor shall record in writing, the details of all persons applying for employment, including *inter alia*:

- (a) Name, address, age and sex
- (b) Marital status and number of dependants
- (c) Qualifications and previous work experience (whether substantiated or not)
- (d) Period since last economically active
- (e) Preference for type of work or task.

C 07.05 The Contractor shall make his selection of workers from amongst the applicants, taking due cognisance of his requirements for the workforce and the provisions of the contract in regard to the provision of training to the workforce and in accordance with the following principles:

- a) No potential temporary worker shall be precluded from being employed by the Contractor on the execution of the Works, by virtue of his lack of skill in any suitable operation forming part of the Works, unless -
 - I. all available vacancies have been or can be filled by temporary workers who already possess suitable skills, or
 - II. the Time for Completion allowed in the Contract, or the remaining portion of the Contract Period (as the case may be) is insufficient to facilitate the creation of the necessary skills.
- (b) Preference shall be given to the unemployed and single heads of households.
- (c) The Contractor shall, in so far as is reasonably practicable, give priority to accommodating the applicants' expressed preferences regarding the types of work for which they are selected.
- (d) The selection process shall not be prejudicial to youth (over the age of fifteen years) and women.

C 07.06 After making his selection, the Contractor shall advise the Engineer thereof, in writing and the Engineer shall, without undue delay, ratify the Contractor's selection.

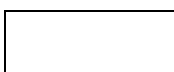
C 07.07 The provisions of this clause shall apply *mutatis mutandis* in respect of the selection of additional or replacement members of the workforce as may be necessary from time to time during the Contract.

C 07.08 The Contractor shall, after selecting his temporary workforce, arrange at his own cost for the appointment of the Liaison Officer as representative of the workforce to act on their behalf with regards to all matters pertaining to the workforce."

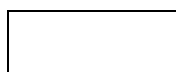
C 08 TERMS AND CONDITIONS PERTAINING TO THE EMPLOYMENT OF THE TEMPORARY WORKFORCE

C 08.01 All temporary workers engaged in accordance with the provisions of Part A of the Project Specifications, shall be employed on the terms and conditions of employment as are consistent with those as set out in this Contract. The Contractor shall implement and adhere strictly to such terms and conditions relating to the employment of the temporary workforce, and subject only to the provisions of this Contract, shall not employ any temporary worker on terms and conditions which are less favourable to the worker or inconsistent with the standards and norms generally applicable to temporary workers in the Civil Engineering Industry and applicable to the particular area.

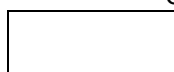
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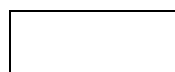
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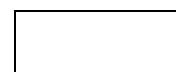
Witness 1



Witness 2



Employer



Witness 1



Witness 2

C 09 LABOUR RELATIONS AND WORKER GRIEVANCE PROCEDURES

C 09.01 The Contractor, as the Employer of the workforce, shall be fully responsible for the establishment and maintenance at his own cost, of satisfactory labour relations on site and the resolution of all grievances of temporary workers as may occur.

C 09.02 The Contractor shall at all times adhere to the accepted norms and standards of labour relations prevailing generally in the Civil Engineering Construction Industry and shall conduct himself in a fair and reasonable manner, within the constraints as may be imposed upon him by the terms of the Contract.

C 09.03 In the event of any temporary worker engaged by the Contractor in terms of the Contract, being aggrieved with regard to his Terms of Employment, working conditions and training, he shall have the right, at his discretion, to be supported in any inquiry or disciplinary hearing or investigation instituted by the Contractor in terms of Subclause C 09.02 above, by one member of the temporary workforce and one member of the Project Committee, which persons shall be nominated by the worker.

C 09.04 In the event of any grievance not being satisfactorily resolved through the application of normal dispute resolution procedures in accordance with Subclauses C 09.02 and C 09.03, then either the Contractor or the worker concerned may require that the matter be referred to the Project Committee for further consideration, with a view to facilitate the resolution thereof.

C 10 THE SUBCONTRACTORS' WORKFORCES

C 10.01 The provisions of this Part C shall apply *mutatis mutandis* to the workforces employed by all subcontractors engaged by the Contractor and the Contractor shall be fully responsible for ensuring, at his own cost, that the terms of every subcontract agreement entered into are such as to facilitate the application of these provisions in respect of the workforces of all subcontractors.

C 10.02 The Contractor shall at his own cost and to the extent necessary, assist and monitor all subcontractors in the application of the provisions of this Specification, and shall, in terms of the Conditions of Contract, remain fully liable in respect of the acts, omissions and neglects of all subcontractors, in respect of the application of the provisions of this Specification.

C 11 MEASUREMENT AND PAYMENT

The Contractor will not be separately reimbursed or compensated in respect of the provision of the workforce and creation of temporary employment opportunities and all the Contractor's costs associated with compliance with the provisions of this part of the Project Specifications shall, except to the extent provided for in Part D as relevant, be deemed to be included in the rates tendered for the various items of work listed in the Schedule of Quantities.

C3.48

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.4.3 PROJECT SPECIFICATIONS: ADDITIONAL SPECIFICATIONS

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- C3.4.3.1 REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT REGULATIONS
- C3.4.3.2 ENVIRONMENTAL MANAGEMENT PLAN
- C3.4.3.4 REQUIREMENTS OF EXTEND PUBLIC WORKS PROGRAMME
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C3.4.3.1 OCCUPATIONAL HEALTH AND SAFETY ACT 1993: HEALTH AND SAFETY SPECIFICATION

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- C3.4.3.1.1 INTRODUCTION
- C3.4.3.1.2 SCOPE
- C3.4.3.1.3 GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS
- C3.4.3.1.4 OPERATIONAL CONTROL
- ANNEXURE 1: MEASURING INJURY EXPERIENCE
- ANNEXURE 2: EXECUTIVE SHE RISK MANAGEMENT REPORT
- ANNEXURE 3: LIST OF RISK ASSESSMENTS

C3.49

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

HEALTH & SAFETY SPECIFICATIONS

FOREWORD

These health & safety specifications have been compiled in terms of the Occupational Health & Safety Act no. 85 of 1993 and Construction Regulations of 7 February 2014 as amended. It must be clear that this document is a management tool and should be used by the Principal Contractor and Contractors in order to comply with the aforementioned Act and regulations.

Should there be any contradiction between this document and the Act; the Act must take preference except where explicitly stated.

Similarly, where this document is silent on a specific health & safety requirement, the Act must be used as the minimum requirement.

Should you be unclear about anything set out in this document, please contact this office.

These specifications are site specific and include all works to be done by the principal contractor. The principal contractor will be responsible for all the work on site.

COHERENT HEALTH AND SAFETY SPECIFICATIONS FOR
ELECTRIFICATION OF SELWANE (105 UNITS)

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Annexure C
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Annexure D
Occupational Health & Safety – Health & Safety pricing guidelines

Annexure E
Occupational Health & Safety File Index

Annexure F
Notification of Construction work

1. INTRODUCTION AND BACKGROUND

1.1 The Construction Regulations (February 2014) places the onus on the Client to prepare coherent health & safety specifications, highlighting risks not successfully eliminated during design. The Client also has the opportunity to set the tone and standard of occupational health & safety on the construction site.

1.2 Responsibility and Accountability

It is imperative to understand the process of determining legal accountability, as the OHS-Act is the only criminal Act still administered by the Department of Labour. It *assumes* that the CEO is overall accountable even though he may delegate some of his responsibilities. This principal is entrenched in Section 37(1) of the Act and copied below for your benefit. This is generally referred to as the REASONABLE MAN TEST.
SECTION 37: Acts or omissions by employees or Mandatories

Occupational Health and Safety Act of 1993
AND CONSTRUCTION REGULATIONS 2014

REQUIREMENTS:

1. Your attention is drawn to “General Duties of Employers to their Employees” as required by Section 8 of the Act.
2. You are required to:
 - 2.1 Sign a written “Agreement with Mandatory” as required by Sect 37(1) (2) of the Act before commencing any work on site.
 - 2.2 Ensure that all your employees receive the necessary Induction Training and have proof thereof.
Note: You must ensure that all employees under your control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences.
 - 2.3 Ensure the provision of Welfare Facilities for your employees as per Construction Regulation 30.
 - 2.4 Provide the Client/Principal Contractor with your SHE Plan and Specifications
 - 2.5 Ensure that Method Statements, Risk Assessments and Safe Work Procedures are done and available.
 - 2.6 Provide the Client/Principal Contractor with written appointment of the person who is going to supervise the Construction Work per Construction Reg. 8(1).
 - 2.7 Provide the Client/Principal Contractor with written designation of your nominated Health and Safety Representative as per Section 17(1).
Note: Your Health and Safety Representative will be expected to attend the Client/Principal Contractor safety meetings.
 - 2.8 If you employ more than five (5) persons, you are required to provide your own First Aid Box (GSR 3(2)).
 - 2.9 If you employ more than ten (10) persons, you are required to provide your own qualified First Aider as per GSR 3(4)
Note: If you have difficulty in complying with items 2.7 and 2.8 above, you may arrange/come to an agreement with the Client/Principal Contractor to make use of his First Aid facilities in case of injury. You will be expected to communicate such an agreement to your employees.
 - 2.10 When working with Hazardous Chemical Substances, comply with HCS Reg. 3
Note: Asbestos and Lead Regulations are separate.
 - 2.11 When doing blasting to comply with Explosives Regulations Chapter 10
 - 2.12 When doing Excavation Work, comply with Construction Reg. 13
 - 2.13 When using Construction Vehicles, comply with Construction Reg. 23
 - 2.14 Ensure that good Housekeeping, Stacking and Storage principles are applied on this project as per Construction Reg. 27 and 28
 - 2.15 Ensure that appropriate measures are taken to avoid the risk of Fire/Explosion and comply with requirements of Reg. 29

3. You are responsible for providing your own legal safety documents and registers to comply with the Act's requirements.
A copy of the OHS Act of 1993 and the Construction Regulations; 2014 will be available for perusal in the Principal Contractor's site office.
4. You are required to comply with General Safety Regulations 2(1) to (7) and provide your employees with: personal protective equipment which will allow them to carry out their work in a safe manner, e.g. hard hats, gloves, safe footwear, eye protection, ear protection, waterproof clothing etc.
5. Reporting of Incidents of Occupational Diseases shall be done as per General Admin. Regulation 8 (Also see Sect 24 of the Act)
6. Compensation for Occupational Injuries and Diseases Act (No 130 of 1993) You are required to provide the Client/Principal Contractor with proof of registration with the Compensation Commissioner/Federated Employer(s) Mutual when signing this agreement. If you are not registered, the Client/Principal Contractor may deduct the necessary amounts from your progress payments and pay it over to the Commissioner to ensure that you are insured. See Section 80 and 89 of the COID Act.

Signature: _____
(Client/Agent of Client or Principal Contractor)

Signature _____
(Principal Contractor or Contractor)

AGREEMENT WITH MANDATARY
IN TERMS OF SECTION 37(1) AND (2)

DEFINITION OF MANDATARY

Includes an agent, a contractor or sub-contractor for work, but without derogating from his status in his own right as an employer or user

SECTION 37(1)

Whenever an employee does or omits to do any act which it would be an offence in terms of this Act for the employer of such employee or a user to do or omit to do, then, unless it is provided that –

- (a) in doing or omitting to do that act the employee was acting without the connivance or permission of the employer or any such user;
- (b) it was not under any condition or in any circumstance within the scope of the authority of the employee to do or omit to do an act, whether lawful or unlawful, of the character of the act or omission charged; and
- (c) all reasonable steps were taken by the employer or any such user to prevent any act or omission of the kind in question, the employer or any such user himself shall be presumed to have done or omitted to do that act, and shall be liable to be convicted and sentenced in respect thereof; and the fact that he issued instructions forbidding any act or omission of the kind in question shall not, in itself, be accepted as sufficient proof that he took all reasonable steps to prevent the act or omission.

SECTION 37(2)

The provisions of subsection (1) shall mutates mutandis apply in the case of a mandatory of any employer or user, except if the parties have agreed in writing to the arrangements and procedures between them to ensure compliance by the mandatory with the provisions of this Act.

ACCEPTANCE BY MANDATARY

In terms of the provisions of Section 37(2) of the Occupational Health and Safety Act 1993

I, _____

acting for and on behalf of _____

(Company/Close Corporation/Enterprise/Owner/User) undertake to ensure that the requirements and provisions of the Act and Regulations are complied with.

Signature: _____

Print Name: _____
(Principal Contractor or Contractor)

Designation: _____

Date: _____

Mandatory-Workmen's Compensation/Federated Employers Mutual No.:

Signature: _____ Print Name: _____
(Client/Agent of Client or Principal Contractor)

Designation: _____ Date: _____

Company: _____

Project/Site: _____

OCCUPATIONAL HEALTH AND SAFETY ACT OF 1993
CONSTRUCTION REGULATIONS 2014
CONTRACTOR

CONSTRUCTION REGULATION 7

7(3): A principal contractor shall be responsible for the following:

- (a) to provide any contractor who is making a bid or is appointed to perform construction work for the principal contractor, with the relevant sections of the health and safety specifications pertaining to the construction work that has to be performed;
- (b) to appoint each contractor contemplated in paragraph (a) in writing for the part of the project on a construction site

APPOINTMENT

Contractor, _____ (name)

of: _____
(Company/Close Corporation/Enterprise/Owner/and Labour Only Contractor)

is hereby appointed to perform construction work at:

Project/Site: _____

Company: _____
(Principal Contractor)

Job/Safety specifications: _____

You are reminded that:

1. your documented Health and Safety plan based on the relevant applicable sections of the Principal Contractors Health and Safety Specifications, are provided to the Principal Contractor before commencing work on site
2. the Principal Contractor will discuss/negotiate with you regarding the contents of the Health and Safety Plan to approve it for implementation
3. a Health and Safety File, which shall include all documentation required in terms of the provisions of the Act and Regulations are kept available on site for inspection (Risk Assessments)
4. should you appoint another Contractor to perform or assist you with Construction Work, the responsibilities as required by the Construction Regulations shall apply to you as if you were the Principal Contractor
5. you promptly provide the Principal Contractor with any information which might affect the Health and Safety of any person at work carrying out Construction Work or any person who might be affected by the work of such a person at work or which might justify a review of the Health and Safety Plan
6. per Regulation 5(c) audits of your Health and Safety Plan will be undertaken on at least a monthly basis.

7. all your Employees have to undergo Safety Induction before starting work

Signature: _____ Date: _____
(Principal Contractor)

Designation: _____

ACCEPTANCE OF APPOINTMENT

I, _____ accept and understand the requirements of this appointment

Signature: _____ Date: _____
(Contractor)

Designation: _____

1.3 Purpose of the Health and Safety Specifications

The purpose of the H&S specifications document is to assist in achieving compliance with the Occupational Health & Safety Act 85/1993 (OHS Act) and the now promulgated Construction Regulations (February 2014) in order to prevent or as far as possible, reduce incidents and injuries. These specifications should act as the basis for the drafting of the Principal Contractor and Contractors' coherent health & safety plans. The health & safety specifications set out the requirements to be followed by the Principal Contractor and other Contractors (BASE – LINE RISK ASSESSMENT) so that the health & safety of all persons, including the public potentially at risk may receive the same priority as other facets of the project e.g. cost, program, environment, quality, etc.

1.4 Implementation of the Health and Safety Specifications (Drafting of the Coherent Health & Safety Plan)

These health & safety specifications document forms an integral part of the contract, and the Principal Contractor is expected to use it when compiling its project-specific coherent health & safety plan. The Principal Contractor must forward a copy of these specifications to all Contractors at their bidding stage so that they can in turn prepare coherent health & safety plans relating to their operations.

2. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM ELEMENTS

2.1 Scope of the Project

These Specifications set out the requirements for eliminating or if this is not possible, for minimising as far as reasonably practicable, the risk of incidents and injuries occurring at Ba-Phalaborwa Municipality. This document covers work to be undertaken of the project and sets out the rules and procedures for engagement on the project. The scope also addresses legal compliance, Ba-Phalaborwa Municipality standards, hazard identification and risk assessment, risk control, and the promotion of a health and safety culture amongst those working on the project. The health & safety specifications also make provision for the protection of those persons other than employees.

The Extent of the works:

1.3. TEMPORARY WORK

CLEAR THE RIGHT OF WAY AND CAMPSITES, IN ORDER TO ERECT THE NECESSARY SITE OFFICES, OWN ACCOMMODATION FACILITIES, SANITARY UNITS, BULK WATER CONTAINERS, SITE STORE, ETC.
THE WORKS ALSO INCLUDE THE CLEAN-UP OF SITE CAMP AND SITE STORE, AS WELL AS TRANSPORTATION OF EXCESS MATERIAL NOT USED, BACK TO THE STORES.

1.4. PERMANENT WORK

- 1.2.19 POSITION ALL POLES AND ANY STAYS ASSOCIATED WITH A PARTICULAR STRUCTURE, USING THE SERVICES OF AN ESKOM APPROVED REGISTERED SURVEYOR.
- 1.2.20 EXCAVATE POLE, STAY AND STRUT HOLES, ERECT WOODEN POLES, STAYS AND STRUTS AND BACKFILL AND COMPACT POLE, STAY AND STRUT HOLES IN LAYERS OF 300MM.
- 1.2.21 INSTALL MV AND LV STAYS IN ACCORDANCE WITH THE DISTRIBUTION STANDARD.
- 1.2.22 ASSEMBLE THE MV STRUCTURES AS WELL AS THE ARIAL BUNDLE CONDUCTOR LV STRUCTURES ACCORDING TO THE DISTRIBUTION STANDARDS. WOODEN POLES OF 7M, 9M AND 11M ARE USED AND STRUCTURES ARE SINGLE-POLE DESIGN.
- 1.2.23 ASSEMBLE AND INSTALL THE MV LINKS ACCORDING TO DISTRIBUTION STANDARDS.
- 1.2.24 RUN OUT AND STRING BARE OVERHEAD LINE CONDUCTOR (ACSR), CODE NAME FOX, AND 2, 3 AND 4 CORE 35MM² / 70 MM² ABC.
- 1.2.25 INSTALL THE TRANSFORMERS, INCLUDING MV SURGE ARRESTORS, LV FUSE PROTECTION UNITS. POLE MOUNTED 11KV/415V THREE PHASE TRANSFORMERS OF PREFERRED SIZE 100KVA & 50KVA SABS 780 ARE USED.
- 1.2.26 EXCAVATE TRENCHES TO A DEPTH OF AT LEAST 500MM FOR TYPE 1 MV AND LV THREE POINT STAR EARTH ELECTRODES, INSTALL ELECTRODES AND BACKFILL AND COMPACT ON COMPLETION.
- 1.2.27 INSTALL SPLIT METER POLE TOP DISTRIBUTION BOXES COMPLETE WITH ONE PIGTAIL BOLT AND ONE EYENUT PER DISTRIBUTION BOX.
- 1.2.28 CONNECT POLE TOP BOXES TO LV FEEDERS WITH PHASING AS INDICATED ON DRAWING.
- 1.2.29 TEST AND COMMISSION INFRASTRUCTURE.
- 1.2.30 EXCAVATE 5 M AND 7M POLE HOLES WHERE 5M AND 7M SERVICE POLES ARE NECESSARY, ERECT 5M AND 7M WOODEN POLES, BACKFILL AND COMPACT POLE IN LAYERS OF 300MM.
- 1.2.31 INSTALL METERS ON POLE BOXES OUTSIDE OF HOUSE, PLUGS AND KEYPAD IN HOUSES.
- 1.2.32 CONNECT METERS TO SPLIT METER POLE TOP BOXES VIA OVERHEAD AIRDAC, ACCORDING TO DISTRIBUTION STANDARD.
- 1.2.33 ALL MATERIALS MUST BE BRAND NEW.
- 1.2.34 TEST AND COMMISSION HOUSE CONNECTIONS AND ISSUE COC'S.
- 1.2.35 CAPTURE ALL CONNECTIONS ON CORDAPTIX PREPAID BULK UPLOADS; FILL IN CONNECTION SLIPS IN FULL.
- 1.2.36 THE WORK WILL BE TAKEN OVER BY THE ESKOM ON COMPLETION.

2.2 Interpretations

2.2.1 Application

This specifications document is a legal compliance document compiled in terms of the OHS Act & Construction Regulations 2014 and is therefore binding. The document must be read in conjunction with other relevant legislation.

2.2.2 Definitions

The definitions as listed in the OHS Act 85/1993 and Construction Regulations (February 2014) shall apply.

2.3 Minimum Administrative Requirements

2.3.1 Notification of Intention to Commence Construction Work

The Principal Contractor must notify the Provincial Director of the Department of Labour in writing before construction work commences. A copy of this notification must be held in the Principal Contractor's health & safety file on site. The fax transmission slip will serve as proof of notification. See attached Annexure "F"

2.3.2 Assignment of the Principal Contractor's / Contractors' Responsible Persons to Supervise and Co-ordinate Health and Safety on Site

The Principal Contractor and all Contractors must make supervisory appointments as well as other relevant appointments in writing (as stipulated by the OHS Act and Construction Regulations 2014). See attached Annexure 'B' for more detail on what health & safety management appointments are relevant on this project.

2.3.3 Competence of the Principal Contractor's / Contractors' Appointed Competent Persons

The Principal Contractor and Contractors' competent persons for the various risk management portfolios must fulfil the criteria as stipulated in terms of the definition 'Competent' in accordance with the Construction Regulations (February 2014).

2.3.4 Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

The Principal Contractor must have in its possession a letter of good standing issued by its Compensation Assuror as proof of registration. Contractors must also hold proof of workman's compensation assurance registration in the form of a letter of good standing and forward a copy to the Principal Contractor before they begin work on site. Contractors must be in good standing at all times while carrying out work on site.

2.3.5 Health and Safety Organogram

Including all appointed risk management competent persons. In cases where appointments have not yet been made, the organogram shall reflect the intended positions.

The organogram must be updated when there are changes in the Site Management Structure, and dated accordingly. The organogram merely serves as a quick reference to who is responsible for what risk portfolio in what area.

2.3.6 Preliminary Hazard Identification and Risk Assessments, Progress Hazard Identification and Risk Assessments Reviews.

The Principal Contractor must cause preliminary hazard identification and risk assessment to be performed under the leadership of a competent person before commencement of construction work. On this project detailed task-specific risk assessments based on the proposed sequence of work (method of work) must be compiled. Generic risk assessments will not be accepted.

The assessed risks, together with written safe work procedures for the 'medium & high-risk' rated activities must form part of the coherent site specific health and safety plan submitted for approval by House of Safety. The risk assessments must include:

- a) A list of hazards identified as well as potentially hazardous tasks;
- b) The risks which may result based on the list of hazards and tasks;
- c) A set of safe work procedures to be implemented with the aim of eliminating or if this is not possible, reducing and/or controlling the risks as far as reasonably practicable to ALARP (as low as reasonably practicable);
- d) A monitoring and review procedure of the risk assessments as they change i.e. how will the risk assessments be reviewed, when will they be reviewed and by whom.

The Principal Contractor must ensure that all Contractors inform, instruct and train their workers regarding any hazards, the associated risks and the related safe work procedures to be implemented before any work commences and thereafter at regular intervals as the risks change and as new risks develop. This training should be carried out in the form of toolbox health & safety talks. Contractors must conduct their own toolbox talks and submit proof of these talks in the form of attendance registers to the Principal Contractor at least every two weeks. Every worker on site must undergo such toolbox safety talks with the attendance registers kept in the Principal Contractor's safety file. Contractors must conduct their own hazard identifications and risk assessments specific to their operations and forward a copy to the Principal Contractor.

The Principal Contractor when required must report on the status of these Contractor risk assessments to the Client i.e. at audits.

2.3.7 General Record Keeping

The Principal Contractor and all Contractors must keep and maintain all the necessary Health and Safety records to demonstrate compliance with these Coherent Specifications, the OHS Act 85/1993, and the Construction Regulations (February 2014). The Principal Contractor must also ensure that all records of incidents/injuries, emergency procedures, training, planned maintenance inspections, monthly contractor audits, etc. are kept in the health & safety file(s) held in the site office. The Principal Contractor must ensure that every Contractor keeps its own health & safety file, maintains the file and makes it available on request (the file must include the Contractor's health & safety plan and all relevant records). Such 'Contractor safety files' must be audited by the Principal Contractor on a monthly basis with audit reports kept as proof.

2.3.8 Injury / Incident Reporting and Investigation

Injuries are to be categorised into first aid; medical; disabling (lost day); and fatal. When reporting injuries to the Client, these categories must be used. The Principal Contractor must investigate all injuries. All Contractors must report injuries to the Principal Contractor immediately and the Principal Contractor must inform the Client immediately. All incidents reportable in terms of the provisions of Section 24 of the OHS Act must be reported to the local Dept. of Labour in the prescribed manner.

2.3.9 Consolidation of Health & Safety Documentation

It is the duty of the Principal Contractor to ensure that all documentation required to be kept or generated during the construction phase is consolidated into one set of documents that must be handed over to the Client upon completion of the construction work. This consolidated safety file(s) should include instructions from the design team that will be required for the continued safe operation and maintenance of the new structure(s).

2.3.10 Offences and Penalties

Penalties may be imposed on the Principal Contractor and Contractors for ongoing non-compliance with the provisions of the Client's coherent health & safety specifications, the Principal Contractor's coherent health & safety plan, site health & safety procedures and rules. Non-compliances identified during safety agent audits and visits will be categorised into one of three levels based on severity. These will be as follows: Life threatening situation - a prohibition order will be issued by means of a written instruction in the site instruction book or an explanation in an audit report. This activity must be seized immediately and corrective measures taken. Serious injury possible – a contravention notice will be issued with a time frame for compliance stipulated. Minor or no injury may result – an improvement notice will be issued. The corrective measures stipulated in the audit report must be taken. The methodology used to decide the above levels will be directly linked to the risk assessments of the Principal Contractor and contractors, Ba-Phalaborwa Municipality Standards. The decision of the safety Agent will be final.

2.4 Principal Contractors, Contractors and Sub-contractors

2.4.1 Principal Contractor's and Contractors' Requirements

The Principal Contractor must ensure that all Contractors appointed by them comply with these Specifications, the Principal coherent health & safety plan as well as the OHS Act, Construction Regulations (February 2014), and other relevant legislation that may relate to the activities directly or indirectly. A Contractor, when appointing other Contractors as 'Sub-contractors', shall *mutatis mutandis* ensure compliance as if it was the Principal Contractor.

The Principal Contractor may only allow a Contractor to begin work on site after receiving a coherent health & safety plan which must include a project specific hazard identification, risk assessments and safety measures. The Principal Contractor must test competency and finally approve his sub – contractor coherent site specific health and safety plan. The Principal Contractor must audit each of its contractors on a monthly basis, with audit reports kept in the health & safety file on site. The audit must include an administrative assessment as well as a physical inspection of the contractor's site activities. *The Principal Contractor must stop any Contractor from carrying out construction work that is not in accordance with the Principal Contractor's and/or Contractor's health & safety plan or if there is an immediate threat to the health and safety of persons.*

The Principal Contractor shall take all reasonable steps necessary to ensure co-operation between all contractors to enable each of those contractors to comply with the provisions of the Construction Regulations;

The Principal Contractor shall take all reasonable steps to ensure that each contractor's coherent health and safety plan is implemented and maintained on the construction site: Provided that the steps taken shall include periodic audits at intervals mutually agreed upon between the Principal Contractor and contractors, but at least once every month;

The Principal Contractor must ensure that where changes are brought about to the design and construction, that sufficient health and safety information and appropriate resources are made available to contractors so as to allow them to execute the work safely;

The Principal Contractor must ensure that every contractor is registered and in good standing with a recognised compensation fund or with a licensed compensation insurer prior to work commencing on site;

The Principal Contractor must ensure that potential contractors submitting tenders have made provision for the cost of health and safety measures during the construction process;

The Principal Contractor shall discuss and negotiate with the contractor the contents of the coherent health and safety plan and shall finally approve that plan for implementation;

The Principal Contractor shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall include a record of all drawings, designs, materials used and other similar information concerning the completed structure;

The Principal Contractor may only appoint a contractor to perform construction work when such Principal Contractor is reasonably satisfied that the contractor he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely and that the contractor is an approved Ba-Phalaborwa Municipality contractor.

2.4.2 Principal Contractor / Contractor Competency Assessment

The Principal Contractor must be reasonably satisfied that the contractors it intends to appoint have the necessary competencies and resources to safely conduct the work they will be appointed for. This should be established at tender stage and before appointments are made. One of the preferred ways of determining whether a contractor is competent is to make sure the contractor is an accredited contractor for Ba-Phalaborwa Municipality. Once the contractor is appointed, but before it begins work on site a site-specific safety plan must be discussed and negotiated with the Principal Contractor. Such safety plan must be approved for implementation by the Principal Contractor.

The Principal Contractor and Contractors should submit the following documentation for perusal and verification by the Client and Principal Contractor respectively:

- _ Coherent health & safety plan as compiled for this project; (including Risk assessments, safe work procedures, fall protection plan, PTW Issuer/PTW Holder certificates
- _ Management Structure as envisaged at tender (organogram);
- _ Letter of Good Standing with the Compensation Commissioner or FEM;

- Proof of health & safety training and other related training; (CV and certificates) Legislative appointment letters
- Notification of Construction work; (proof notification was done)

2.4.3 Pricing for Occupational Health & Safety Compliance All parties bidding to do work on this construction project must ensure that they have made provision for the cost of complying with this Specifications document as well as with the OHS Act and incorporated Regulations as a minimum requirement in their tender documentation. It must also be taken into consideration that time is money, which implies that sufficient time must be allowed for the implementation of the minimum OHS standards. No additional claims will be entertained at a later stage should a compliance requirement be prescribed in the OHS Act, incorporated regulations or in this Specifications document.

Annexure:

2.4.4 Contractors' Coherent Health & Safety Plans [Construction Regulations 7]

1. Introduction:

The Construction Regulations (2014) aims to improve overall management and co-ordination of Health, Safety and Welfare throughout the Construction Phase and reduce the large number of serious and fatal injuries and cases of ill health, which occur every year in the Construction Industry.

In terms of the Construction Regulations (2014), the Principal Contractor is required to develop a Health and Safety Plan before work commences on site and review it throughout the Construction Phase. The degree of detail required in the Health and Safety Plan and the time and effort in preparing it should be in proportion to the nature, size and level of Health and Safety risks involved in the project. Projects involving minimal risks will call for simple, straightforward plans. Large projects or those involving significant risks such as this project will need much more detail.

Annexure:

2. What should the construction health & safety plan cover?

The Construction Health and Safety Plan should set out the arrangements for ensuring the Health and Safety of everyone carrying out the construction work as well as all other persons who may be affected by it. The index of this plan must be in line with Annexure:

2.4.5 Communication and Management of the work

The Principal Contractor must indicate in its health and safety management plan that it has made provision for the following:

- a. Management structure and responsibilities
- b. Health and Safety goals for the project and arrangements for monitoring and review of Health and Safety performance i.e. safety meetings; contractor meetings; risk assessment review, etc.
- c. Arrangement for:
 - i. Regular liaison between parties on site i.e. meetings
 - ii. Consultation with the work force i.e. toolbox talks

- iii. The exchange of design information between the Client, designers, and Contractors on site
 - iv. Selection and control of Contractors i.e. selection criteria; inspections; audits, etc.
 - v. Site health & safety induction and onsite training i.e. toolbox talks
 - vi. Welfare facilities, first aid, emergency planning and fire prevention strategy
 - vii. The reporting and investigation of injuries and incidents including near misses what the intended system will be
 - viii. The production, approval and review of risk assessments, safe work procedures and method statements and how does the company's risk assessment system work.
- d. Site specific rules and procedures.

2.5 Client identified Hazards and Potentially Hazardous Situations

RISK: Site Establishment				RISK ASSESSMENT			
REVISION NUMBER	01	WRITTEN BY	REVIEWED BY	APPROVED BY			
NAME							
SIGNATURE							
DATE WRITTEN			Document No				
REVIEW DATE			Contract No				
A INJURY SEVERITY		B FREQUENCY of OCCURENCE		RATING			
0	No injury	0	Has not occurred in last two years	RISK CLASSIFICATION	RISK VALUE		
2	Minor laceration, wound (first aid case)	2	Occurs very seldom	LOW	0-6		
4	More severe injury medical attention	4	Occurs occasionally	MEDIUM	6-16		
8	Serious injuries, broken bones, amputation etc	8	Occurs often	HIGH	16-32		
10	Loss of life / fatality	10	Could / has happened	CRITICAL	32-40		
C POTENTIAL DAMAGE / LOSS		D ENVIRONMENT		ACTION REQUIRED			
0	No damage, minimal costs R10 – 100	0	No effect	Spillage, noise, water, dust/ vapours/ fauna and flora	LOW	Supervision, training, certification, method/risk assessments, safe work procedures training, toolbox talks.	Good instruction.
2	Minor damage, small costs R100 – 1000	2	Minor effect		MEDIUM	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate.
4	Med damage, stoppage (On site repair) medium cost R1000 – 5000	4	Serious effect (Short term)		HIGH	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate.
8	More serious damage // loss / delay < R5000 - +	8	Very serious effect (Long Term)		CRITICAL	Close competent supervision, training certification, method/risk	

10		Severe damage, long term stoppage, high costs		10		Catastrophic effect				assessments, safe work procedures, PJO's, work permits, training and toolbox talks.		Intolerable, change method, transfer risk.	
ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS	PJO			
			A	B	C	D	R			RIGHT	WRONG		
1. Transport of plant & equipment by low bed & truck.	Plant falling off in transit.	Fatality / Injury. Damage to property.	8	2	8	0	18H	<ul style="list-style-type: none"> Certified tie-down tackle. Correct tie-down methods. 	Competent staff. Skills training / toolbox talk.				
	Traffic accident.	Fatality / Injury. Damage to property.	8	2	8	0	18H	<ul style="list-style-type: none"> Toolbox talk. 	Competent driver.				
	Preparing low bed for load.	Head & hand injuries. Back strain.	4	2	4	0	10M	<ul style="list-style-type: none"> Wear correct PPE. Skills training / toolbox talk. 	Issue of PPE & enforce PPE rule. Direct supervision.				
	Machine running off during loading / unloading.	Fatality / Injury. Damage to property.	8	2	8	0	18H	<ul style="list-style-type: none"> Ensure loading / unloading on level surface. 	Direct supervision.				
	Slippery underfoot / high climbing.	Injury - fractures.	4	2	4	0	10M	<ul style="list-style-type: none"> PPE -. Skills training / toolbox talk. Check for mud or obstacles. Stand & step firm & use both hands when climbing. 	Enforce PPE rule. Direct supervision. Demarcated access points to plant.				
	Heavy weights.	Bodily injuries / back strain.	4	2	4	0	10M	<ul style="list-style-type: none"> Wear correct PPE. Skills training / toolbox talk. 	Induction. Direct supervision.				
	Failure of lifting equipment & tackle.	Fatality / Injury. Damage to property.	8	2	8	0	18H	<ul style="list-style-type: none"> Certified lifting equipment & tackle. Skills training / toolbox talk. 	Direct supervision. Competent staff. Demarcated no person's area.				
2. Preparation of office & accommodation area.	Moving machinery.	Pedestrian &/or traffic accident. Fatality / injury.	8	2	8	0	18H	<ul style="list-style-type: none"> Correct PPE to be worn. Plant & vehicles fitted with flashing beacons & hooters. Toolbox talk. 	Competent staff. Enforce PPE rule.				

Electrification of Selwane (105 Units)

Health and Safety Specifications

	Dust.	Occupational illness. Eye irritation/injury.	4	2	4	0	10M	<ul style="list-style-type: none"> Wear correct PPE. Use dust suppression methods. 	Issue of PPE. Water to be sprayed at work area.		
	Use of hand tools - saws, picks etc.	Hand &/or eye injuries.	2	2	2	0	6L	<ul style="list-style-type: none"> Wear correct PPE. Tools in good condition. Skills training / toolbox talk. 	Enforce PPE rule. Inspection of tools.		
3. Erection of perimeter fence.	TLB digging of stay poles.	Pedestrian &/or traffic accident. Fatality / injury	4	2	4	0	10M	<ul style="list-style-type: none"> Correct PPE to be worn. Plant & vehicles fitted with flashing beacons & hooters. Toolbox talk. 	Competent staff. Enforce PPE rule.		
	Dust / dry cement dust.	Occupational illness. Eye irritation/injury.	4	2	4	0	10M	<ul style="list-style-type: none"> Wear correct PPE. Use dust suppression methods. 	Issue of PPE. Water to be sprayed at work area.		
	Use of hand tools - picks, shovels, etc.	Hand &/or eye injuries.	2	2	2	0	6L	<ul style="list-style-type: none"> Wear correct PPE. Tools in good condition. Skills training / toolbox talk. 	Enforce PPE rule. Inspection of tools.		
4. Certificate of Compliance on completion of installations.	Improper installations.	Fire. Electrical shock. Damage to property.	0	2	4	2	8M	<ul style="list-style-type: none"> Only an Accredited person may issue certificate. 	Competent qualified staff only. Audit.		
5. Water reticulation.	Pipes not deep enough.	Loss of water. Unnecessary downtime.	0	2	4	0	6L	<ul style="list-style-type: none"> Buried at least 300mm deep. 	Direct supervision. Skills training / toolbox talk.		
	Use of hand tools - picks, shovels, etc.	Hand &/or eye injuries.	2	2	2	0	6L	<ul style="list-style-type: none"> Wear correct PPE. Tools in good condition. Skills training / toolbox talk. 	Enforce PPE rule. Inspection of tools.		
	Slippery underfoot / high climbing.	Slip & fall fractures & sprains. Serious bodily injuries.	4	2	4	0	10M	<ul style="list-style-type: none"> Wear correct PPE. Fall prevention & protection equipment. Skills training / toolbox talks. 	Fall protection & prevention plan drawn up & implemented. Direct supervision.		

RISK: Manual Material Handling				RISK ASSESSMENT			
REVISION NUMBER	01	WRITTEN BY	REVIEWED BY	APPROVED BY			
NAME							
SIGNATURE							
DATE WRITTEN			Document No				
REVIEW DATE			Contract No				
A INJURY SEVERITY		B FREQUENCY of OCCURENCE		RATING			
0	No injury	0	Has not occurred in last two years	RISK CLASSIFICATION	RISK VALUE		
2	Minor laceration, wound (first aid case)	2	Occurs very seldom	LOW	0-6		
4	More severe injury medical attention	4	Occurs occasionally	MEDIUM	6-16		
8	Serious injuries, broken bones, amputation etc	8	Occurs often	HIGH	16-32		
10	Loss of life / fatality	10	Could / has happened	CRITICAL	32-40		
C POTENTIAL DAMAGE / LOSS		D ENVIRONMENT		ACTION REQUIRED			
0	No damage, minimal costs R10 – 100	0	No effect	Spillage, Noise, Water, Dust / vapours / fauna and flora.	LOW	Supervision, training, certification, method/risk assessments, safe work procedures training, toolbox talks.	Good Instruction.
2	Minor damage, small costs R100 – 1000	2	Minor effect		MEDIUM	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, Mitigate.
4	Med damage, stoppage (On site repair) medium cost R1000 – 5000	4	Serious effect (Short term)		HIGH	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, Mitigated.
8	More serious damage // loss / delay < R5000 - +	8	Very serious effect (Long Term)		CRITICAL	Close competent supervision, training certification, method/risk assessments, safe work procedures, PJO's, work permits, training and toolbox talks.	Intolerable, change method, transfer risk.
10	Severe damage, long term stoppage, high costs	10	Catastrophic effect				

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS	PJO	
			A	B	C	D	R			RIGHT	WRONG
1. Inspect the Loading or offloading area.	No unsafe access to working area used.	<ul style="list-style-type: none"> Damage to delivery truck 	2	2	4	0	6L	<ul style="list-style-type: none"> Make sure that all Objects like stones, planks are clear from the loading & Offloading area Supervisor must be at all times visible on site (loading & offloading area.) 	Supervisor.		
2. Positioning the delivery truck or site light vehicle at the loading & offloading area.	Unsafe reverse actions by driver.	<ul style="list-style-type: none"> Collide with the buildings, structures, equipment, plant, or people. 	4	2	4	2	12M	<ul style="list-style-type: none"> Flagmen to ensure visual contact is maintained with driver in the driver side mirror. Flagmen not to walk or stand behind the delivery truck or Light vehicle. 	Supervisor.		
	Fail to switch off the engine of the delivery truck or light vehicle and apply the hand brake and isolate.	<ul style="list-style-type: none"> The delivery truck or light vehicle moves whilst busy with the offloading process. Unplanned movement. Unauthorized use. 	4	2	4	0	10M	<ul style="list-style-type: none"> The driver of the delivery truck or light vehicle must be switch off the engine, remove the keys from the ignition and apply the hand brake. Assistant to place stop blocks in front and behind one of the rear wheels. 	Supervisor.		
	Fail to install shop blocks/chocks.	<ul style="list-style-type: none"> The delivery truck moves whilst busy with the offloading process. Drives over people. Collide with other vehicles. 	8	2	8	0	18H	<ul style="list-style-type: none"> The assistant must install one stop block in front and behind one of the rear wheels. 	Supervisor.		

3. Manual Loading & Offloading of tools and equipment from a truck or light vehicle.	No or unsafe access onto delivery truck or Light Vehicle.	<ul style="list-style-type: none"> Falling from delivery truck or light vehicle. 	4	2	2	0	6L	<ul style="list-style-type: none"> The ladder must be secured when ascending and descending by a person holding the ladder. 	Supervisor.		
	Using an unsecure Ladder.	<ul style="list-style-type: none"> Falling from ladder. 	4	2	4	0	6L	<ul style="list-style-type: none"> The ladder must be secured by a person standing on the ground when employee ascend or descend. 	Supervisor.		
	Using sub-standard ladder.	<ul style="list-style-type: none"> Ladder collapsing and employee falling. Serious injury. 	8	2	8	0	18H	<ul style="list-style-type: none"> Ladder must be inspected and comply with site requirements. Defective ladders will be withdrawn from the service immediately. 	Supervisor.		
	Incorrect method used to manhandle tools and equipment.	<ul style="list-style-type: none"> Back, neck & knee injuries. 	2	4	2	0	4L	<ul style="list-style-type: none"> All employees will be trained on the correct manual handling and lifting method. Lift with your knees and not your back. No employees are allowed to lift more than 25 KG or a 1/3 of his body weight. Rather use mechanical equipment to lift heavy objects or ask for assistance. 	Supervisor.		
	Heavy equipment lifted by a single person.(load Insufficient employees to load or offload)	<ul style="list-style-type: none"> Neck, back and knee injuries. Damage to equipment, delivery truck or light vehicle. 	4	2	4	0	10M	<ul style="list-style-type: none"> No employees are allowed to lift more than 25 KG or a 1/3 of his body weight. Rather use mechanical equipment to lift heavy objects or ask for assistance. 	Supervisor.		

	Unsafe positioning of hands and fingers when loading and offloading.	<ul style="list-style-type: none"> Hand and finger injuries. 	4	2	4	0	10M	<ul style="list-style-type: none"> Employees will be made aware of nip and pinch points between the object and the delivery truck or LIGHT VEHICLE in and that they must keep their hands and fingers clear from under any object. 	Supervisor.		
	Not using gloves when loading and offloading.	<ul style="list-style-type: none"> Hand and fingers injuries. 	4	2	4	0	10M	<ul style="list-style-type: none"> All employees will be trained on the use and maintenance of PPE. Gloves will be used when offloading equipment. 	Supervisor.		
	Throwing material to or from heights or to each other.	<ul style="list-style-type: none"> Employees can get stricken by tools or equipment. 	2	2	2	0	6L	<ul style="list-style-type: none"> No throwing of material to or from heights will be allowed to throw any object to each other. 	Supervisor.		
	Poor communication.	<ul style="list-style-type: none"> Hand and finger injuries. Damage to tools or equipment. 	4	2	4	0	10M	<ul style="list-style-type: none"> Ensure effective communication between all involved. 	Supervisor.		
	Uneven terrain, lose objects in walkways.	<ul style="list-style-type: none"> Tripping, slipping and falling over objects. 	4	2	4	0	10M	<ul style="list-style-type: none"> Pre determine path to be followed when plan to carry material: remove tripping hazards as far possible. Always ensure that you are able to see where you are walking when carrying material. 	Supervisor.		

	Long length of equipment carried by a single person.	<ul style="list-style-type: none"> Hit other employees or persons with the object being carried when turning. 	4	2	4	0	10M	<ul style="list-style-type: none"> Single person to avoid carrying long length material on shoulder, rather carry hip height. If 2 persons carry as close to both ends as possible to avoid hitting other when carrying or turning. 	Supervisor.		
	Workers in Contact sharp edges and nip points.	<ul style="list-style-type: none"> Cuts and pinching to hand or body. 	2	4	2	0	6L	<ul style="list-style-type: none"> Identify and cover sharp edges that could cause harm, wear full PPE. Place object on dunnage's to avoid fingers nipped. Wear gloves and make use of gwalas to lift off ground and place object to support prior to entering hands between an object and ground or possible nip points. 	Supervisor.		
	Heavy equipment lifted by a single person.	<ul style="list-style-type: none"> Neck, back & knee injuries. 	4	2	4	0	10M	<ul style="list-style-type: none"> No employees are allowed to lift more than 25 KG or a 1/3 of his body weight. Rather use mechanical equipment to lift heavy objects or ask for assistance. 	Supervisor.		
4. Stacking of material.	Stacked material not barricaded.	<ul style="list-style-type: none"> Tripping over material or. Plant collides with material. 	4	2	4	0	10M	<ul style="list-style-type: none"> All stacked material are to be barricade with snow netting, barricading are to be tagged, on register and daily inspected by appointed responsible person. 	Supervisor.		

	Stored energy, unplanned movement.	<ul style="list-style-type: none"> Materials fall from stack on person. Round equipment starts rolling. 	8	2	8	0	10M	<ul style="list-style-type: none"> Always remove material only from top if stacked, do not pull anything from the middle or bottom of a pile. Make use of wooden wedges to support round items and prevent unplanned movement. Attempt to stack same size, shape and type of material with each other, do not stack material to high and ensure all stacked material on heights are secured to avoid falling to lower levels. 	Supervisor.		
	No safe walkways between materials.	<ul style="list-style-type: none"> Slip or trip when walk on stacked material, ankle sprain ect. 	4	2	4	0	10M	<ul style="list-style-type: none"> During stacking always provide safe walkways between material, no tripping hazard and no protruding material. 	Supervisor.		
	Snakes under or between materials.	<ul style="list-style-type: none"> Snakebites could cause fatality or serious injury. 	10	2	10	0	22H	<ul style="list-style-type: none"> Always be aware that snakes and insects/ spiders could be present under stacked material. Avoid placing hands where you cannot see, wear full PPE at all time when handling material. 	Supervisor.		
	Poor housekeeping.	<ul style="list-style-type: none"> Environmental impact, trip hazards, fire hazard. 	2	2	2	2	6L	<ul style="list-style-type: none"> Keep work areas clean and neat at all times. 	Supervisor.		

RISK: Fire Prevention				RISK ASSESSMENT			
REVISION NUMBER	01	WRITTEN BY	REVIEWED BY	APPROVED BY			
NAME							
SIGNATURE							
DATE WRITTEN		Document No					
REVIEWDATE		Contract No					
A INJURY SEVERITY		B FREQUENCY of OCCURENCE		RATING			
0	No injury	0	Has not occurred in last two years	RISK CLASSIFICATION	RISK VALUE		
2	Minor laceration, wound (first aid case)	2	Occurs very seldom	LOW	0-6		
4	More severe injury medical attention	4	Occurs occasionally	MEDIUM	6-16		
8	Serious injuries, broken bones, amputation etc	8	Occurs often	HIGH	16-32		
10	Loss of life / fatality	10	Could / has happened	CRITICAL	32-40		
C POTENTIAL DAMAGE / LOSS		D ENVIRONMENT		ACTION REQUIRED			
0	No damage, minimal costs R10 – 100	0	No effect	Spillage, noise, water, dust/ vapours/ fauna and flora	LOW	Supervision, training, certification, method/risk assessments, safe work procedures training, toolbox talks.	Good instruction.
2	Minor damage, small costs R100 – 1000	2	Minor effect		MEDIUM	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate.
4	Med damage, stoppage (On site repair) medium cost R1000 – 5000	4	Serious effect (Short term)		HIGH	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate.
8	More serious damage // loss / delay < R5000 - +	8	Very serious effect (Long Term)		CRITICAL	Close competent supervision, training certification, method/risk assessments, safe work procedures, PJO's, work permits, training and toolbox talks	Intolerable, change method, transfer risk.
10	Severe damage, long term stoppage, high costs	10	Catastrophic effect				

ACTIVITY	POTENTIAL HAZARD	POSSIBLE RESULT	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS	PJO	
			A	B	C	D	R			RIGHT	WRONG
1. Adequate equipment to be provided in the working area and shall be of suitable capacity and located in suitable areas	Inadequate and wrongly placed fire equipment can cause a delay in dealing with fire should it occur.	Fire getting out of control injuries to persons and damage to property.	4	2	2	2	10	<ul style="list-style-type: none"> Adequate fire equipment to be provided and placed at suitable locations. 	Visual and physical inspections		
2. Fire equipment must be unobstructed at all times and regularly inspected and serviced.	Non-availability of equipment	Loss of life and extensive damage property	10	2	8	0	20	<ul style="list-style-type: none"> Monthly checklist of all equipment. 	Visual and physical inspections to be done by fire warden		
3. Firefighting team on site should be trained in the operation of firefighting equipment and should be familiar with fire equipment locations.	Untrained personnel using wrong type of equipment to extinguish the fire. Delays in searching for fire extinguishers	Injury to employees and damage to property.	2	2	4	2	10	<ul style="list-style-type: none"> Provide training and have fire drills periodically 	Supervisor / Safety Officer control.		
4. Water based fire extinguisher shall not be used on electrical equipment or burning liquids	Electrocution. Increased spread of fire. Explosions	Fatality/Injury to employees and damage to property.	10	2	8	0	20	<ul style="list-style-type: none"> Trained personnel. 	Induction by supervisor.		

Electrification of Selwane (105 Units)

Health and Safety Specifications

5.	Fire alarms to be tested to make sure that it is working and that it can be heard everywhere on site.	Fire alarm not functional or inaudible.	Fatality/Injury to persons and damage to property.	10	2	8	0	20	<ul style="list-style-type: none"> Monthly checklist. 	Fire warden to control		
6.	All combustible materials to be stored in appropriate storage places.	Fire can occur.	Injury to people and damage to property.	4	2	2	0	8	<ul style="list-style-type: none"> Induct workers on usage and storage of combustible materials. 	Supervisor to check that this is done		
7.	Storage of any material against the exterior of buildings is prohibited as it interferes with access.	Access blocked and people trapped inside; Firefighting team not able to obtain access.	Fatality/Injury to people and damage to property.	10	2	8	0	20	<ul style="list-style-type: none"> Store material in demarcated areas. 	Supervisor to control on daily basis.		
8.	Cigarettes to be extinguished properly and not thrown into rubbish bins.	Fire can occur in the bins.	Damage to property.	0	2	4	2	6	<ul style="list-style-type: none"> Ash trays and waste bins to be emptied daily. Induct all personnel. 	Site agent/manager to control.		
9.	Persons misusing or wilfully damaging fire equipment to be disciplined.	Shortage or non-operation of firefighting equipment in the case of fire.	Injury to people and damage to property.	4	2	4	0	10	<ul style="list-style-type: none"> Supervisor to enforce. 	Induction by supervisor.		

<p>10. Enough exits to be provided for every person to get out safely and easily.</p>	<p>Overcrowding at exit points during fire.</p>	<p>Bruises, cuts, broken limb even fatalities.</p>	<p>8</p>	<p>2</p>	<p>4</p>	<p>0</p>	<p>14</p>	<ul style="list-style-type: none"> • Fire escape routes and assembly points to be determined and clearly marked. 	<p>Supervisor to check.</p>		
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RISK: Elevated positions				RISK ASSESSMENT				
REVISION NUMBER	01	WRITTEN BY	REVIEWED BY	APPROVED BY				
SIGNATURE								
DATE WRITTEN			Document No					
REVIEWDATE			Contract No					
A INJURY SEVERITY		B FREQUENCY of OCCURENCE		RATING				
0	No injury	0	Has not occurred in last two years	RISK CLASSIFICATION	RISK VALUE			
2	Minor laceration, wound (first aid case)	2	Occurs very seldom	LOW	0-6			
4	More severe injury medical attention	4	Occurs occasionally	MEDIUM	6-16			
8	Serious injuries, broken bones, amputation etc	8	Occurs often	HIGH	16-32			
10	Loss of life / fatality	10	Could / has happened	CRITICAL	32-40			
C POTENTIAL DAMAGE / LOSS		D ENVIRONMENT		ACTION REQUIRED				
0	No damage, minimal costs R10 – 100	0	No effect	Spillage, noise, water, dust/ vapours/ fauna and flora	LOW	Supervision, training, certification, method/risk assessments, safe work procedures training, toolbox talks.	Good instruction.	
2	Minor damage, small costs R100 – 1000	2	Minor effect		MEDIUM	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate.	
4	Med damage, stoppage (On site repair) medium cost R1000 – 5000	4	Serious effect (Short term)		HIGH	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate.	
8	More serious damage // loss / delay < R5000 - +	8	Very serious effect (Long Term)		CRITICAL	Close competent supervision, training certification, method/risk assessments, safe work procedures, PJO's, work permits, training and toolbox talks.	Intolerable, change method, transfer risk.	
10	Severe damage, long term stoppage, high costs	10	Catastrophic effect					
ACTIVITY		POTENTIAL HAZARD		RISK EVALUATION		PREVENTATIVE MEASURES		PJO

		POSSIBLE RESULT	A	B	C	D	R		CONTROLS	RIGHT	WRONG
1. No gear, debris or other material shall be dropped from heights	Falling objects.	Injury to employees, possible fatal injuries and damage to property.	4	2	4	0	10	All material and equipment must be lowered or by means of a chute to lower levels.	Appointed Competent Person daily inspections. Skills training, induction and toolbox talks.		
2. Openings in floor shall be boarded over, covered or barricaded off.	Employees could trip and fall into openings. Debris or tools and equipment may fall through openings.	Bruises, scratches, fractures, fatality or permanent disability and damage to equipment.	8	2	8	0	18	Demarcate, barricade and cover all openings to avoid unnecessary incidents. Put kickboards on scaffold to prevent items falling off scaffolds.	Appointed Competent Person to develop Fall Protection plan and do daily inspections. Skills training, induction and toolbox talks.		
3. Sides and edges of slabs must be fitted with guardrails.	Employees may fall over edge of building.	Bruises, scratches, fractures, fatality or permanent disability.	8	2	8	0	18	Place handrails around all edges of slab (use scaffolding or 8 gauge galvanized wire). Do not allow cranes to position closer than 3m from edge of slab during lifting operation.	Charge hand, supervisor to control. Induct employees on safe work procedures. All employees working on edge of slab to wear safety belts and tie onto structure or guard rail.		

4. Safety belts / harness must be worn at all times.	Not hooking safety belt catch to anchor point. Anchor point not secure or strong enough.	Bruises, scratches, fractures, fatality or permanent disability.	8	2	8	0	18	Ensure anchor point is secure and can hold the weight. Ensure all safety belt catches are hooked onto anchor points. If there is no place to hook a safety belt – a lifeline must be supplied.	Supervisor to induct all employees on hazards. Monthly check done on all safety belts and registers kept up to date.		
5. Safety nets to be used to protect against falling objects.	Deliberately dropping materials or equipment will damage the net.	Net not strong enough to hold the weight, could cause injury to employees working below and damage to property.	4	2	4	0	10	Ensure correct safety net is used. Ensure net is not damaged. Avoid not being exposed to sharp edges or rough surfaces, etc.	Competent person to inspect safety regularly. All defects to be reported to supervisor.		
6. Areas below elevated work area to be kept clear and clean.	Poor housekeeping can cause scaffold to destabilize.	Bodily injuries / fatality. Damage to property.	8	2	8	0	18	Skills training and toolbox talks to ensure good standard of housekeeping.	Competent person to inspect safety regularly. All defects to be reported to supervisor.		
7. Do not stand on empty drums as scaffolds or trestles.	Drum may buckle or break	Injury to employee. Poor quality of work.	2	2	2	0	6	Ensure sufficient amount of scaffolding and trestles available.	Skills training and toolbox talks.		

RISK:				RISK ASSESSMENT			
REVISION NUMBER	01	WRITTEN BY	REVIEWED BY	APPROVED BY			
NAME							
SIGNATURE							
DATE WRITTEN			Document No				
REVIEW DATE			Contract No				
A INJURY SEVERITY		B FREQUENCY of OCCURENCE		RATING			
0	No injury	0	Has not occurred in last two years	RISK CLASSIFICATION	RISK VALUE		
2	Minor laceration, wound (first aid case)	2	Occurs very seldom	LOW	0---6		
4	More severe injury medical attention	4	Occurs occasionally	MEDIUM	6---16		
8	Serious injuries, broken bones, amputation etc.	8	Occurs often	HIGH	16---32		
10	Loss of life / fatality	10	Could / has happened	CRITICAL	32---40		
C POTENTIAL DAMAGE / LOSS		D ENVIRONMENT		ACTION REQUIRED			
0	No damage, minimal costs R10 – 100	0	No effect	Spillage, noise, water, dust / vapours/ fauna and flora	LOW	Supervision, training, certification, method/risk assessments, safe work procedures training, toolbox talks.	Good instruction.
2	Minor damage, small costs R100 – 1000	2	Minor effect		MEDIUM	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate
4	Med damage, stoppage (On site repair) medium cost R1000 – 5000	4	Serious effect (Short term)		HIGH	Competent supervision, training certification, method/risk assessments, safe work procedures training, toolbox talks.	Change method, mitigate.
8	More serious damage // loss / delay <R5000 - +	8	Very serious effect (Long Term)		CRITICAL	Close competent supervision, training certification, method/risk assessments, safe work procedures, PJO's, work permits, training, and toolbox talks.	Intolerable, change method, transfer risk.
10	Severe damage, long term stoppage, high costs	10	Catastrophic effect				

Electrification of Selwane (105 Units)

Health and Safety Specifications

ACTIVITY	ACTIVITY	POSSIBLE RESULT/HAZARD	RISK EVALUATION					PREVENTATIVE MEASURES	CONTROLS	PJO	
			A	B	C	D	R			RIGHT	WRONG
1.	Excavate pole, stay and strut holes.(Hand-digging).	<ul style="list-style-type: none"> • Several body injuries. • Eye injuries. • Possible fall. 	2	4	8	0	14	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, goggles and full overall. • Barricade pole holes. 	Contractor responsible person.		
2.	Excavate pole, stay and strut holes. (Drilling).	<ul style="list-style-type: none"> • Several body injuries. • Eye injuries. • Hearing injuries of loud nose. • Inhale of dust. • Possible fall 	4	4	8	2	18	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, goggles, full overall, dust mask and hearing protection equipment. • Barricade pole holes. • Use of water during drilling proses to reduced dust. • Barricade safe distance around drilling proses to protect community. 	Contractor responsible person		
3.	Erect wooden poles, stay and struts and backfill and compact pole, stay and strut holes.	<ul style="list-style-type: none"> • Several body injuries. • Swinging of wooden poles. • Ingesting of creosote can lead to Burning in mouth, throat as well as stomach pain, damage to the kidney and liver disease, seizures, skin irritation similar to chemical burns, rashes, mental disarray and death. • Creosote treated products can cause skin and scrotum cancer. • Eye irritation and can lead to blindness. 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, dust mask and full overall. • Use of ropes to secured poles during erection. • Cleaning liquid for creosote on skin • Eye drips for protection against possible eye irritation of creosote and immediate medical care. • Immediate medical care after contact with and ingest of creosote. • Used of gloves. • Barricade safe distance around the erection proses to protect community. 	Contractor responsible person		
4.	Install MV and LV stays.	<ul style="list-style-type: none"> • Several body injuries. • Possible fall. • Ingesting of creosote can lead to Burning in mouth, throat as well as stomach pain, damage to the kidney and liver disease, seizures, skin irritation similar to chemical burns, rashes, mental disarray and death. 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, full overall and safety belt/harness. • Safety chain/belt/ strap to secure ladder against pole. • Cleaning liquid for creosote on skin • Eye drips for protection against possible eye irritation of creosote and immediate medical care. • Immediate medical care after contact with and ingest of creosote. • Used of cloves. 	Contractor responsible person		

		<ul style="list-style-type: none"> • Creosote treated products can cause skin and scrotum cancer. • Eye irritation and can lead to blindness. 									
5.	Assemble the MV structure and the Arial bundle conductor.	<ul style="list-style-type: none"> • Several body injuries. • Possible fall. • Ingesting of creosote can lead to Burning in mouth, throat as well as stomach pain, damage to the kidney and liver disease, seizures, skin irritation similar to chemical burns, rashes, mental disarray and death. • Creosote treated products can cause skin and scrotum cancer. • Eye irritation and can lead to blindness. 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, full overall and safety belt/harness. • Safety chain/belt/ strap to secure ladder against pole. • Cleaning liquid for creosote on skin • Eye drips for protection against possible eye irritation of creosote and immediate medical care. • Immediate medical care after contact with and ingest of creosote. • Used of cloves. 	Contractor responsible person		
6.	Assemble and install MV links	<ul style="list-style-type: none"> • Several body injuries. • Possible fall. • Ingesting of creosote can lead to Burning in mouth, throat as well as stomach pain, damage to the kidney and liver disease, seizures, skin irritation similar to chemical burns, rashes, mental disarray and death. • Creosote treated products can cause skin and scrotum cancer. • Eye irritation and can lead to blindness. 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, full overall and safety belt/harness. • Safety chain/belt/ strap to secure ladder against pole. • Cleaning liquid for creosote on skin • Eye drips for protection against possible eye irritation of creosote and immediate medical care. • Immediate medical care after contact with and ingest of creosote. • Use of cloves. 	Contractor responsible person		
7.	Run out and string bare overhead line conductor.	<ul style="list-style-type: none"> • Several body injuries. • Possible fall. • Eye injuries 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE- Hardhat, safety shoes, glove, goggles, full overall. • Cleaning liquid to clean hand after working with aluminium. 	Contractor responsible person		

		<ul style="list-style-type: none"> • Damage of overhead line conductor. • Aluminium has a toxic effect on human Body. It damage the nervous systems and attack the brain. It has been link to Anaemia, memory defects, memory loss, headaches, irritability, insomnia, learning disability, dementia, mental confusion and more severely, Alzheimer's, Lou Gehrig's and Parkinson's diseases. 						<ul style="list-style-type: none"> • Regular testing for aluminium level in body. • Used of gloves. • Gaud against damage of overhead line at road crossings and pedestrians 		
8.	Install of pole mounted transformers, surge arrestors and MV fuse production units.	<ul style="list-style-type: none"> • Several body injuries. • Possible fall. • Ingesting of creosote can lead to Burning in mouth, throat as well as stomach pain, damage to the kidney and liver disease, seizures, skin irritation similar to chemical burns, rashes, mental disarray and death. • Creosote treated products can cause skin and scrotum cancer. • Eye irritation and can lead to blindness. • Aluminium has atoxic effect on human Body. It damage the nervous systems and attack the brain. It has been link to Anaemia, memory defects, memory loss, headaches, irritability, insomnia, learning disability, dementia, mental confusion and more severely, Alzheimer's, Lou Gehrig's and Parkinson's diseases. 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, full overall and safety belt/harness. • Safety chain/belt/ strap to secure ladder against pole. • Cleaning liquid for creosote on skin • Eye drips for protection against possible eye irritation of creosote and immediate medical care. • Immediate medical care after contact with and ingest of creosote. • Use of cloves. • Cleaning liquid to clean hand after working with aluminium. • Regular testing for aluminium level in body. 	Contractor responsible person.	

Electrification of Selwane (105 Units)

Health and Safety Specifications

9.	Excavate trenches for three point star earth electrodes, install electrodes and compact.	<ul style="list-style-type: none"> • Several body injuries. • Eye injuries. • Possible fall. 	2	4	8	0	14	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, full overall and safety belt/harness. • Safety chain/belt/ strap to secure leader against pole. 	Contractor responsible person.		
10.	Install split meter pole top distribution boxes and connect meters.	<ul style="list-style-type: none"> • Several body injuries. • Possible fall. • Ingesting of creosote can lead to Burning in mouth, throat as well as stomach pain, damage to the kidney and liver disease, seizures, skin irritation similar to chemical burns, rashes, mental disarray and death. • Creosote treated products can cause skin and scrotum cancer. • Eye irritation and can lead to blindness. • Aluminium has a toxic effect on human Body. It damage the nervous systems and attack the brain. It has been link to Anaemia, memory defects, memory loss, headaches, irritability, insomnia, learning disability, dementia, mental confusion and more severely, Alzheimer's, Lou Gehrig's and Parkinson's diseases. 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, full overall and safety belt/harness. • Safety chain/belt/ strap to secure ladder against pole. • Cleaning liquid for creosote on skin • Eye drips for protection against possible eye irritation of creosote and immediate medical care. • Immediate medical care after contact with and ingest of creosote. • Use of gloves. • Cleaning liquid to clean hand after working with aluminium. • Regular testing for aluminium level in body. 	Contractor responsible person.		
11.	Connect pole top boxes to lv feeders.	<ul style="list-style-type: none"> • Several body injuries. • Possible fall. • Ingesting of creosote can lead to Burning in mouth, throat as well as stomach pain, damage 	10	2	10	0	22	<ul style="list-style-type: none"> • PPE – Hardhat, safety shoes, gloves, full overall and safety belt/harness. • Safety chain/belt/ strap to secure ladder against pole. • Cleaning liquid for creosote on skin 	Contractor responsible person.		

Electrification of Selwane (105 Units)

Health and Safety Specifications

		<p>to the kidney and liver disease, seizures, skin irritation similar to chemical burns, rashes, mental disarray and death.</p> <ul style="list-style-type: none"> • Creosote treated products can cause skin and scrotum cancer. • Eye irritation and can lead to blindness. • Aluminium has a toxic effect on human Body. It damage the nervous systems and attack the brain. It has been link to Anaemia, memory defects, memory loss, headaches, irritability, insomnia, learning disability, dementia, mental confusion and more severely, Alzheimer's, Lou Gehrig's and Parkinson's diseases. 						<ul style="list-style-type: none"> • Eye drips for protection against possible eye irritation of creosote and immediate medical care. • Immediate medical care after contact with and ingest of creosote. • Use of gloves. • Cleaning liquid to clean hand after working with aluminium. • Regular testing for aluminium level in body. 			
12.	Test and commission infrastructure.	<ul style="list-style-type: none"> • Possible shock. • Possible faults. • Possible trips. 	4	0	8	0	12	<ul style="list-style-type: none"> • All testing and commissioning done according to SANS 0142 and ESKOM regulations. 	Contractor responsible person		
13.	Test and commission house connection.	<ul style="list-style-type: none"> • Possible shock. • Possible faults. • Possible trips. 	4	0	8	0	12	<ul style="list-style-type: none"> • All testing and commissioning done according to SANS 0142 and ESKOM regulations. 	Contractor responsible person		
14.	Site office and yard.	<ul style="list-style-type: none"> • Several body injuries. • Damage of equipment. • Damage of material. 	4	2	8	2	16	<ul style="list-style-type: none"> • Wooden pole must be stored in a proper way and according to sizes. • Line and Arial bundle contactor must be stored in a proper way and according to sizes. • All other material and equipment must be stored in a proper way and according to sizes and type. 	Contractor responsible person		

15.	Life line connection.	<ul style="list-style-type: none">• Possible shock.• Possible faults.• Possible trips.	8	2	10	2	22	<ul style="list-style-type: none">• Life line work must be done according to Eskom specifications and ORHVS regulations	Contractor responsible person.		
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Other possible risks you need to consider.

1. Existing services
2. Interface with the public – roads and pavements
3. Hazardous chemical such as solvents, cleaning agents, cement, fuels, oils, epoxies, etc.
4. Electrical installations (temporary and permanent)
5. Site security and access control issues
6. Finishing trades

2.5.2 Unforeseeable Hazards

The Principal Contractor must immediately notify Contractors as well as the Client, in writing, of any hazardous or potentially hazardous situations that may arise during the performance of construction activities so that the necessary precautions may be taken before such work begins.

2.6 Site Operational Requirements

2.6.1 Health and Safety Representative(s)

The Principal Contractor and all Contractors must ensure that Health and Safety Representative(s) are appointed under consultation with the employees. The H&S representatives must be competent to carry out their functions. The appointments must be in writing. The Health and Safety Representatives should carry out monthly inspections, keep records of the inspections and report all findings to the Responsible Person or safety officer forthwith and at monthly health & safety committee meetings. At least one Health & safety representatives is required by all Employers on site.

2.6.2 Health and Safety Committees

The Principal Contractor must ensure that project health and safety committee meetings are held monthly with minutes kept. Meetings must be chaired by the Principal Contractor's Responsible Person [CR 7(1) person]. All Contractors' Responsible Persons and Health & Safety Representatives must attend the Principal Contractor's monthly health & safety meetings. The Principal Contractor's appointed supervisors must also attend health & safety meetings. The following topics must be tabled at meetings: management appointments and risk management portfolios; sub-contractor legal compliance issues; injuries and incidents; hazards and risk assessments (present and foreseen); safety procedures; method statements for upcoming activities; planned inspections and registers/record keeping, etc. The committee chairperson must sign off and date the minutes.

2.6.3 Health and Safety Training

2.6.3.1 Induction

The Principal Contractor must ensure that all site personnel including all sub-contractors undergo the agreed health & safety induction training session held and managed by the P/Contractor before any worker starts work on the project. A record of attendance must be kept in the health & safety file. Workers must carry proof of inductions on their person while on site i.e. identification passport cards or similar to be agreed.

2.6.3.2 Awareness

The Principal Contractor must ensure that, on site, periodic toolbox health & safety talks take place at least once every two weeks. All site personnel including all sub-contractors must attend safety talks at such intervals and keep proof thereof. These talks should deal with risks relevant to the construction work at hand i.e. they should be based on the job-specific risk assessments and safe work procedures. Records of attendance must be kept in the P/contractor's health & safety file. All contractors' employees must attend safety awareness toolbox talks carried out by their supervisors, the attendance registers must be copied to the Principal Contractor together with information on the information discussed at the session.

2.6.3.3 Competence

All competent persons must have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control and/or carry out. This must be assessed on a regular basis e.g. training, evaluation, and periodic audits by the Client, progress meetings, etc. The Principal Contractor is responsible to ensure that Competent Contractors are appointed to carry out construction work on site.

2.6.4 Health & Safety Audits, Monitoring and Reporting

The Principal Contractor is obligated to conduct monthly audits on all Contractors appointed by it and keep audit reports in its health & safety file. Contractors have to audit their sub-contractors and keep records of these audits in *their* health & safety files, made available on request. The Client/Agent will conduct monthly audits on the Principal Contractors' safety management plan.

2.6.5 Emergency Procedures

The procedure must detail the response procedures including the following key elements:

List of key competent personnel;
Details of emergency services;
Actions or steps to be taken in the event of the specific types of emergencies;
Evacuation procedures: including routes and exits to be available on a drawing.
Emergency procedure(s) must include, but shall not be limited to: fire; spills; injury to employees; damage to material / equipment / plant; use of hazardous substances; bomb threats; major incidents/injuries; evacuation; etc. The Principal Contractor must advise the Client in writing forthwith, of any emergency situations, together with a record of action taken/action to be taken. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and made available to site personnel. The emergency plan will need to be reviewed from time to time as conditions/environment changes i.e. as building work increases in extent.

2.6.6 First Aid Boxes and First Aid Equipment

The Principal Contractor and all Contractors must appoint First Aider(s) in writing. The Principal Contractor must appoint at least one First Aider to start with, which first aider must be certificated. Copies of valid certificates are to be kept on site. The Principal Contractor must provide at least 1 (one) first aid box, adequately stocked at all times. Due to the nature of this project i.e. satellite work stations/areas, further first aid boxes must be provided close to the various work stations to allow for quick, effective treatment of injured persons. As the work progresses and the structure increases in height, extra first aid

2.6.7 Personal Protective Equipment (PPE) and Clothing

The Contractor must ensure that all site workers are issued with and wear the appropriate PPE as indicated in their risk assessments. The Contractors must make provision and keep adequate quantities of SANS approved PPE on site at all times according to their risk assessments. Safety harnesses are mandatory wherever work takes place in an elevated area where safe working platforms or ladders are not possible. Overalls clearly indicating the Contractor's logo must be worn and all sub-contractors must conform to this requirement. Eye protection must be worn by those working grinders, skill saws, high pressure water cleaners. Even those workers in close proximity to these operations will also be required to wear such eye protection.

Safe footwear will be required by all workers. A high visibility vest is mandatory on a Ba-Phalaborwa Municipality site.

Hard hats will be required by all workers, including those involved with internal work.

2.6.8 Occupational Health and Safety (OHS) Signage

The Principal Contractor must provide adequate on-site OHS signage. Including but not limited to: 'construction work - no unauthorised entry', 'beware of overhead work', 'hard hat area', first aid – to be posted up at all work areas/zones.

Signage must also be posted up at strategic locations to warn the public of diversions, alternative through ways and other irregularities caused by construction work (pedestrians and motorists).

Signs are also required as per law e.g. scaffolding and other potential risk areas/operations such as exposed edges and openings and trenches/excavations where persons are at work. Safety signs and awareness posters will also be required in strategic locations on site such as frequently used access routes, stairways and entrances to structures and buildings where the workers will continuously be made aware of health & safety. Health & safety signage must be well maintained including weekly inspections, cleaning, replacement and repair.

2.6.9 Public and Site Visitor Health & Safety

Public walkways and roadways must be kept clean and free of construction materials so as to prevent any negative impact on the public. Public roadways and walkways will have to be cleaned on a regular basis – daily inspections to be conducted by the Principal Contractor with action to be taken without delay (daily).

Site visitors must be briefed on the hazards they may be exposed to as well as what measures are in place or should be taken to control these hazards. The Construction Regulations require that a record of these 'inductions' be kept on site. It is advised that a visitor book with site rules leaflet be kept at the reception/site office and all visitors to be directed to such point where they must

read through the site safety information and sign the visitor book. It will be the Principal Contractor's prerogative to decide whether site visitors require supervision while on site. Visitor hard hats must be kept in the site office.

Where hoarding structures are required, such hoarding must be at least 1.8m high ready fence panels covered with shade cloth, secured in place and erected at a safe distance from the actual work. The public will also have to be diverted away from any demolition zones by means of signs and other suitable diversion methods. Glazed windows facing onto public walkways and roadways must be secured so as to prevent any risk of windows shattering and falling onto persons below. This may require boarding windows closed where the risk prevails. Where loading/offloading of equipment/plant/rubble/other materials takes place adjacent to public roadways or walkways, flagmen will be required to direct vehicles and pedestrians away from the loading area. Traffic cones or delineators will also be required demarcating the loading zone.

It is envisaged that mobile aluminium scaffolds and the like will be used extensively on site. These scaffolds will have to conform to the minimum requirements as set out in SANS 10085-2004 (A sketch. The maximum height of these scaffolds is not expected to be more than 6m and height to base width ratio are not seen to be a problem (2,5m x 2m frames will be adequate) It has also been identified that some work, especially on the will be directly over exits, shop entrances and public walkways. It is of utmost importance that all work takes place behind an appropriate set of hoarding, thus keeping the public well away from overhead work. Scaffolds will also need to be enclosed by means of readymade fence at all times, isolating any potentially hazardous activities to within the scaffold platform and structure. An opening will be permitted to allow workers to enter/exit the scaffold in order to access the working platform (by means of an access ladder fastened to the internal face of the frames). The Safety Agent reserves the right to impose such scaffold safety measures.

Walkways must be kept free of materials and must remain slip free. Due to the fact that water, detergents, wet cement, etc. will be used; slippery wet floors will be a risk and must be controlled as far as reasonable. Members of the public will probably have to be re-routed at times to allow for public walkway cleaning and drying. Signs will also have to be placed, warning members of the public of the risk – signs in isolation are however not an adequate safety measure deemed.

2.6.10 Access to Site

Where any permits are necessary from the local authorities, this will be the Principal Contractor's responsibility. The road surface of all public and private roadways and pavements/pedestrian walkways must remain in a reasonably clean state, free of excessive sand, stone, water or other construction related materials. The access gate(s) must be controlled and visitors must sign in and report to the site office for further instruction.

2.6.11 Night Work (After Hours)

No night work will be allowed within the hazardous zone on this project.

2.6.12 Transport of Workers

The Principal Contractor and other Contractors may not transport:
Persons together with goods or tools unless there is an appropriate area or section to store the tools or equipment;
Contractors must adhere to the National Road Traffic Act.

2.6.13 Construction Health & Safety Officer

A full-time construction manager (in terms of Construction Regulation 8) will be required on this project. The construction manager will be required to carry out at least the following duties:

- a) Health & safety audits and inspections on site including administrative and Physical audits of all Contractors' health & safety plans, files and activities, and record findings in the form of audit reports to be kept in the health & safety file;
- b) Assess, and finally approve contractor safety plans;

2.7 Physical Requirements

2.7.1 Deliveries, Waste Removal, Stacking/Storage of Materials

The Principal Contractor and other relevant contractors must ensure that there is an appointed stacking supervisor and all materials, formwork and all equipment is stacked and stored safely, on level, compact ground, out of access ways and no more than three times the minimum base width in height. Pallets of bricks may not be stacked more than two above each other and must be on timber pallets. No construction materials or equipment may be stacked or stored in public areas unless authorised by the client and fenced off as per the client's requirements. Waste materials must be kept within designated construction zones. The Principal Contractor will be responsible for co-ordinating and managing this function.

2.7.2 Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and relevant Contractors shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. A minimum of four 9kg dry chemical powder fire extinguishers must be available in and around the site office establishment and stores. Fire extinguishers must also be placed at all work zones/areas, in strategic locations. Wherever *'hot work'* is taking place, additional fire extinguishers must be on hand. Contractors are responsible for ensuring compliance with hot work procedures and must be in possession of method statements detailing the safe working procedures. *'Hot work'* includes all work that generates a spark or flame and may therefore result in a fire.

Further, during the finishing stages of the construction phase when the finishing trades are on site, fire extinguishers will be required at strategic locations within the work areas – to be supplied and managed by the Principal Contractor.

2.8 Plant, Machinery and Equipment

2.8.1 Fall Protection / Scaffolding or cherry picker / Working in elevated positions

Working at heights includes any work that takes place in an elevated position. The Principal Contractor must submit a risk-specific fall protection plan in accordance with the Construction Regulations (2014) before this work is undertaken.

All scaffolding must comply with the requirements of SANS 10085-2004. Scaffolding must be declared safe for use by a competent scaffold inspector who must complete the scaffold register. Inspections must then be carried out weekly, after bad weather, after any alterations, after an incident, and before dismantling. These scaffold inspections must be conducted by a trained certificated scaffold inspector. The Principal Contractor must keep all scaffold inspection registers on site. Full time scaffold erectors must be available on site

to carry out any scaffold erections, alterations and dismantling. No such work may be carried out by untrained personnel.

Should a scaffold contractor be appointed, the agreement between the two parties must be clearly set out in writing in terms of Section 37(2) of the OHS Act.

The Principal Contractor must also appoint one or more of its own supervisory members to supervise/co-ordinate scaffolding on site.

Working in elevated positions requires the preparation of a fall protection plan. The plan must include all relevant fall related risk assessments and safe work procedures. All persons working in elevated positions must be evaluated for physical and psychological fitness. The Principal Contractor and Contractors must explain their methodology in this regard. The Fall Protection Plan developer must be competent with a minimum qualification of NQF Level 4. These courses can be done through NOSA or any other accredited institution. All persons working in elevated positions must be informed of the risks and safety measures (in other words all workers must be trained on the fall protection plan, in the form of a toolbox safety talk) and records of this training/information session must be kept on site. See Regulation 8(2) of the Construction Regulations for further information to be included in the fall protection plan.

Work from elevated positions may only be conducted as if it were being conducted from a safe ladder or safe scaffold. All openings, edges, and the like must be adequately guarded (see 'edge protection and penetrations' above).

Where fall prevention or fall arrest devices are being used, the correct devices must be used for the intended purpose and they must be properly inspected and maintained. Workers must be trained in the use and maintenance of the fall prevention and arrest equipment/devices. Safety belts for fall arrest are prohibited. Full body harnesses must be worn. Where lifelines or other devices are required, such devices must be detailed in the fall protection plan of the Contractor concerned. Workers must have the opportunity to be secured from falling at all times – this is the responsibility of the Contractor concerned, but must be enforced by the P/Contractor. It is advised that a fall protection permit system be initiated on site with the aim of keeping control of contractors working in elevated locations.

Mobile scaffolds may not exceed 3 X their minimum base width in height and must be adequately boarded as per their loading requirement. Mobile scaffold frame towers must be erected as per the manufacturers' requirements (copies of these erection specifications/data sheets must be available to the scaffold erectors and scaffold supervisor on site). A copy of the scaffold code of practise must available on site (SANS 10085-2004) Temporary gangways/elevated access walkways must comprise of at least three scaffold boards (675mm wide) with guardrails on either side when such walkways are above 2m from the ground. Such gangways and other platforms must be supported from below, preventing excessive loading and platform collapse.

2.8.2 Ladders and Ladder Work

The Principal Contractor must ensure that all ladders are: inspected daily with monthly records kept; in good safe working order; the correct height for the task; extend at least 1m above the landing; fastened and secured; and at a safe angle. Stepladders must be safe for use, must be the correct height for the task and the top two rungs may not be used. Records of inspections must be kept in a register on site. Only Fiberglas ladders to be used.

2.8.3 Electrical Installations and Portable Electrical Tools

The Client will ensure as far as possible that the Principal Contractor is made aware of the positions of all electrical power lines. The Principal Contractor must notify the Client should it not be sure of the location of any electrical power lines.

The Principal Contractor must comply with the Electrical Installation Regulations, the Electrical Machinery Regulations and the Construction Regulations (CR 24).

The Principal Contractor must keep a copy of the Certificate of Compliance (CoC) for its temporary electrical power supply. A revised CoC is required whenever the installation is altered or changed in any way. All temporary electrical installations must be inspected at least weekly by a competent person appointed in writing with records kept. Portable electrical tools and equipment must be visually inspected daily with records kept. It is advised that the P/Contractor appoints the electrical contractor to inspect the temporary electrical installation on a weekly basis with feedback given in a report so that any maintenance and repairs can be undertaken. Such appointed inspector must 'stop' or isolate any distribution board that is unsafe for use.

2.9 Occupational Health

2.9.1 Industrial Hygiene (exposure to physical and chemical stress factors)

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and all Contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards. Prevent inhalation, ingestion, and adsorption through the skin of hazardous chemical substances.

2.9.1.1 Noise induced hearing loss is a highly underrated occupational condition. Occupational noise emitted by construction machinery and power tools must be controlled as far as possible by implementing engineering solutions such as noise dampening, regular maintenance, servicing and inspection, screening off the noise, and reducing the number of persons exposed. Personal protective equipment such as earmuffs and earplugs must also be used in conjunction with engineering controls so as to reduce noise exposure to below the acceptable levels.

2.9.1.2 Ergonomics is the study of how workers relate to their workstations. We advise the Principal Contractor and Contractors to take this into consideration when conducting risk assessments, thereby improving the worker-task relationship, which will in turn improve productivity and reduce chronic conditions such as back strains, joint problems and mental fatigue, amongst others.

2.9.3 Welfare Facilities

The Principal Contractor must supply sufficient toilets (1 toilet per 30 workers), clean, lockable changing facilities, hand washing facilities, soap, toilet paper, and hand drying material. Waste bins must be strategically placed around site and emptied regularly. Workers must not be exposed to hazardous materials/substances while eating and must be provided with adequate, sheltered eating areas complete with benches and tables. Stores may not double up a change rooms or mess areas.

2.9.4 Alcohol and other Drugs

No alcohol and/or other drugs will be allowed on site. No person may be under the influence of alcohol or any other drugs while on the construction site. Any person on prescription medication must inform his/her superior, who shall in turn report this to the Principal Contractor forthwith. Any person suffering from any illness/condition that may have a negative effect on his/her /anyone else's health or safety performance must report this to his/her superior, who shall in turn report this to the Principal Contractor forthwith. Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately, to report back the next day for a preliminary inquiry. The Contractor concerned must follow a full disciplinary procedure and a copy of the disciplinary action must be forwarded to the Principal Contractor for its records.

2.9.5 Duties of Designers

A designer must ensure that he/she complies with the requirements of the Construction Regulation 6. Designers have a duty both to assist in health and safety during construction as well as post construction to ensure safe occupation of the structures concerned. This will include informing the Principal Contractor in writing of any known or anticipated dangers or hazards relating to the construction work, and making available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered. Designers must ensure that the following information is included in a report and made available to the Principal Contractor:

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PRIMARY HEALTH AND SAFETY COMPLIANCE

Project: Ba-Phalaborwa Municipality

ANNEXURE A

The Principal Contractor and Contractors must submit compliance with Annexure 'A' before commencing on work on site. Compliance with Annexure 'A' must be maintained and proven to the Safety Agent at audits.

HSS Item no.	Requirement	Legal Reference	Compliance required:
A1	Health & Safety Plan (H & S Plan)	Constructions Regs.	Withing one weeks of receipt of these specifications
A2	Notification of intention to commence construction / building work	Complete schedule 1 (Construction Regs.)	Before commencement on site
A3	Assignment of responsible persons to supervise construction work	OHS Act ~ Section 16(2) appointee ~ all written appointments under the construction regulations 2014	Before commencement on site
A4	Competence of responsible persons in the form of CV's related work history of appointees	OHS Act ~ Section 16(2) appointee ~ all written appointments under the construction regulations 2014	Together with H & S Plan
A5	Compensation for occupational injuries and diseases – proof of registration and in good standing	COIDA or FEMA	Together with H & S Plan
A6	Health and safety organogram showing all safety management portfolios and positions	Client requirement	Together with H & S Plan
A7	Initial hazard identification and risk assessment document	Construction regulations	Together with H & S Plan
A8	Fall protection plan (first draft) as defined in the construction regulations also, see	Construction regulations	Together with H & S Plan

HSS = health & safety specifications
 OHS Act = occupational health & safety Act
 CR = construction regulations
 COIDA = compensation for occupational injuries and diseases Act

ASSIGNMENT OF PRINCIPAL CONTRACTOR'S AND CONTRACTORS' RESPONSIBLE PERSONS

Project: Ba-Phalaborwa Municipality

ANNEXURE B

The Principal Contractor must make all the management appointments as set out below. Compliance with annexure 'B' to be maintained and proven to the safety agent at audits (Further appointments could become necessary as the project progresses).

Item no.	Appointment	Legal Reference	Requirement
B1	CEO Assignee	Section 16(2)	A competent person to assist the CEO in achieving compliance with the OHS Act – P/Contractor's / Contractor's Responsible person
B2	Construction Work Manager	CR 8(1)	A full time competent person to wupervise and be responsible for health & safety related issues on site. The person is appointed by the Section 16(2)
B3	Assistant Construction Work Manager	CR 8(2)	A full time competent person(s) to assist the CR 8(1) appointee with daily supervision of construction work safety. One of the CR8(2) appointees must be designated to fulfill the role of the CR6(1) when such person is not on site. Make this clear in the appointment letter
B4	Health & Safety Representative(s)	Section 17	A competent person(S) to be appointed to represent the workforce in H & S matters. Reps may attend safety meetings, conduct monthly site audits, attend incident / injury investigations and make recommendations as far as H&S goes.
B5	Health & Safety Committee Member(s)	Sectin 19	H&S reps, site supervisors / foreman and the safety officer should make up the committee, with the CR8(1) appointee chairing the committee.
B6	Incident Investigator	GAR 9	A competent person to head up the investigation team and co-ordinate incident / injury investigation ons site.
B7	Risk assessment co-ordinator	CR9	A competent person to co-ordinate the drafting / reviewing / distribution of risk assessments on behalf of the principal contractor. The same applies to contractors. NQF Level 5
B8	Fall protection plan co-ordinator	CR10	A competent person to co-ordinate the drafting / reviewing / distribution of Fall Protection Plan. The same applies to contractors. NQF Level 4
B9	Emergency plan co-ordinator	Contractor Needs to be in line with service stationERP	A competent person to co-ordinate the drafting / reviewing / distribution of the site emergency procedures / evacuation plan. Such person must be fulltime on site so as to take charge of emergency situations.

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B10	First Aider(s)	GSR 3	A certified person to address first aid situations and take charge of injuries. Level 1 certificate
B11	Lifting machine and lifting tackle supervisor	DMR 18	A competent P/Contractor employee to co-ordinate the management of lifting machines and tackle, ensuring that such equipment is safe for use at all times, inspected when necessary and repaired when required. The operators, banks men and contractors to liaise with this person
B12	Scaffolding inspector	SANS 10085 – 2004	A competent person to inspect scaffolding before use and every time after bad weather, etc.
B13	Scaffold supervisor (P/Contractor)	SANS 10085 – 2004	A competent P/Contractor employee to supervise all scaffolding on site, ensuring that scaffolds are safe for use, inspected, extended / altered, repaired when required and that all trades are co-ordinated and authorised to work on such scaffolds
B14	Scaffolding erector	SANS 10085 – 2004	A competent person(s) to erect scaffolding – leader of the scaffold team
B15	Formwork & support work supervisor (Temporary Works)	CR12	A competent person to supervise all formwork & support work erection & dismantling. This person must also ensure that the equipment is safe and that all the necessary inspections (pre, during, post & every day thereafter) are carried out & records kept by the competent inspectors. Design drawings must be available to this supervisor.
B16	Excavation supervisor / inspector	CR13	A competent person to supervise & inspect excavation work (daily) and ensure that excavations are safe. Records of inspections must be kept by this person.
B17	Ladder inspector	GSR13A	A competent person to inspect ladders daily and ensure they are safe for use, keeping monthly record.
B18	Stacking supervisor	CR28	A competent person to supervise all stacking and storage operations
B19	Explosive powered tools / inspector supervisor	CR21	A competent person to inspect & clean the tool daily, store the tool in a safe location, ensure that cartridges are signed out and in, and control all operations thereof.
B20	Temporary electrical installations inspector	CR24	A competent person to inspect all temporary electrical installations. Including weekly inspections and record keeping.
B21	Portable Electrical Tool Inspector	CR 24	A competent person to co-ordinate / inspect portable electrical tools, leads and plugs.
B22	Fire-fighting equipment inspector	CR29	A competent person to co-ordinate & inspect fire fighting equipment. Including ad-hoc checks and monthly inspections with records kept.

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Health and Safety Specifications

B23	Construction vehicles & mobile plant supervisor	CR23	A competent person(s) to co-ordinate the safety of all construction vehicles & mobile plant. Ensuring that daily inspections are done and records kept, that safety measures are in place, that operators are certified and authorised to operate and that maintenance and services are carried out when required.
B24	Construction safety officer	CR6(6)	A competent person to fulfill the functions as set out in these HSS

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Health and Safety Specifications

GENERAL COMPLIANCE REQUIREMENTS

Project: Ba-Phalaborwa Municipality

ANNEXURE C

The Principal Contractor and Contractors must comply with but not be limited to the requirements tabled below: Prove compliance with annexure 'C' at audits conducted by the safety agent.

Item no.	What	When	Output	Reviewed by Client Agent
C1	Construction – phase Health & Safety Plan	Monthly review	Principal Contractor to indicate the status of Contractors health & safety plans	
C2	Health & Safety File(s)	Open file when construction begins and maintain throughout	Have file on hand at audits. Contractors to report on their file at monthly health & safety audits by the Principal Contractor.	
C3	OHS Act and relevant Regulations	Monthly review	To be kept in the health & safety file on site.	
C4	Health & Safety Induction training, PTW Procedures & SKM Passport System	Every worker before he/she starts work	Attendance registers to be kept	
C5	Awareness Training (Tool Box Talks)	At least once a week	Attendance registers to be kept	
C6	Health & Safety Meetings	Monthly	Meeting minutes to be kept	
C7	Health & Safety Reports & PI / NM	Monthly	<u>Report covering:</u> <ul style="list-style-type: none"> • Incidents / injuries and investigations • Non conformances by employees & Contractors – reports • Internal H&S audit reports 	
C8	Audits on contractors	Monthly	<u>Report covering:</u> <ul style="list-style-type: none"> • H&S File / Plan • WCA status • Appointment letters • Section 37(2) agreements • Risk assessment & safe work procedures • Physical site inspection • Any other contractor specific requirements 	
C9	Emergency procedured	Monthly evaluation of procedure	Compile written procedure as well as tel. Numbers	

C10	Risk assessments & fall protection plan	Updated and signed off	Documented risk assessments to be available	
C11	Method statements	Drawn up and distributed before workers are exposed to the risks	Documented set of method statements reviewed and signed off.	
C12	General Inspections	Daily	<u>Report OHS Act compliance:</u> <ul style="list-style-type: none"> • Excavations • Portable electrical tools • Formwork & support work • Explosive powered tools 	
C13	General Inspections	Daily	<ul style="list-style-type: none"> • Scaffolding • Temporary Electrical Installations 	
C14	General Inspections	Monthly	<ul style="list-style-type: none"> • Fire fighting equipment • Ladders 	
C15	General Inspections	Monthly	<ul style="list-style-type: none"> • Lifting tackle • Oxy-acetylene cutting & welding sets • Fall prevention and arrest equipment 	
C16	General Inspections	6-Monthly	<ul style="list-style-type: none"> • Lifting machines 	
C17	Load tests / performance tests	Annually / once erected, before use	<ul style="list-style-type: none"> • Lifting machines 	
C18	List of Contractors	List to be updated weekly	Compile a list of contractors: Name, supervisor, company tel. Numbers and trade.	
C19	Workman's Compensation	Ongoing	Compile a list of Contractors workman's Compensation proof of good standing.	
C20	Construction site rules & Section 37(2) Mandatory Agreements	Ongoing	Compile a list of all signed up Mandataries. Proof of agreement documents to be kept in H&S file.	

OCCUPATIONAL HEALTH & SAFETY – HEALTH & SAFETY COSTS TO BE INCLUDED
IN THE PRINCIPAL CONTRACTOR'S / CONTRACTORS' PRICE

Project: Ba-Phalaborwa Municipality

ANNEXURE D

In terms of the Construction Regulations (2014), it is the Client's duty to ensure that the cost for health & safety has been provided for by the Principal Contractor, before appointment.

Acting on behalf of our Client, we require the following health & safety costs to be included by the Principal Contractor. It must be made very clear that these are just some of the health & safety costs to be included in your tender price. It is the duty of the Principal Contractor and Contractors to ensure that all aspects of the Occupational Health & safety Act 85/1993 and Construction Regulations are catered for.

Pricing for Occupational Health and Safety measures should include the following if applicable:

ITEM	DESCRIPTION
1	Supply of all items of Personal Protective Clothing/Equipment & ensure use thereof for full compliance
1.1	Steel toe capped safety boots
1.2	Overalls
1.3	Reflective vests(high visibility)
1.4	Hard hats
1.5	Dust masks
1.6	Hearing protection
1.7	Hand gloves
1.8	Any other :Principal Contractor to specify
2	Supply and provision of Equipment for working at Heights & ensure use thereof for full compliance
2.1	Fall protection equipment (Safety Harness)
2.2	Double lanyard harness
2.3	Fall protection plan
2.4	Scaffolding access ladders/toe boards/hand rails
2.5	Portable Ladders
2.6	Any other: Principal Contractor to specify :
3	Barricading: Supply & install, including removal upon completion to ensure full compliance to legislation
3.1	Rigid type barricading
3.2	Temporary fence barricading along perimeter of excavated area
3.3	Danger tape pre-warning tape
3.4	Any other: Principal Contractor to specify :
4	Related Training
4.1	First Aid Training
4.2	Health and Safety Representative training
4.3	Emergency Rescue training(Height)
4.4	Hazard Identification Training
4.5	Training of Personnel working at heights
4.6	Construction Plant Training
4.7	Legal Liability(OHSACT) Training
4.8	COID ACT Training
4.9	Scaffold Erector and Inspector Training
4.10	Any other: Contractor to specify : Working at elevated
5	Occupational Health and Safety Administration
5.1	Develop of a Site Specific Health and Safety Plan and Hazard and Risk Assessment by Competent person.
5.2	Develop of Fall Protection and Rescue Plan by a Competent Fall Protection Plan Developer.

Units)

Health and Safety Specifications

5.3	Competent Occupational Health and Safety Officer/Consultant.
6	Medical Surveillance
6.1	Medical Certificates of fitness for all Employees by an Occupational Health Practitioner.
6.2	Medical Certificates of fitness for all EPWP Employees by an Occupational Practitioner during the duration of the Construction Project.
7	Facilities and Equipment
7.1	Sanitary facility for each sex and for every 30 workers.
7.2	Changing facilities for each sex.
7.3	Sheltered eating areas
7.4	First aid boxes
7.5	Fire extinguishers
7.6	Waste bins
8	Safety Signage
8.1	Sufficient and adequate safety signage on constructions site and at all flammable stores.

ANNEXURE E

The Occupational health and Safety File must consist out of the following documentation:

INDEX

1	Appointment Letter from Ba-Phalaborwa Municipality.
2	Notification of Construction work.
3	Letter of Good standing - COID
4	Copy of Public Liability Insurance Policy and UIF Registration
5	Health and Safety Specifications
6	Scope of Work
7	Tool and Machinery list
8	Method Statement of all work that will be conducted.
9	Risk Assessment Guide / Procedure
10	Baseline Risk Assessments
11	Safe Work Procedures for all Risks
12	Health and Safety Information from Designer
13	Medical Certificates
14	All Health and Safety Related Policies
15	Section 37.2 Agreements
16	Induction Training Information
17	Site Specific Emergency numbers and Emergency Plan
18	Site Specific Fall Protection and Rescue Plan
19	Site Specific Health and Safety Plan
20	Incident / Accident Management Control
21	Traffic Management Plan
22	Contractor Control Procedures
23	Environmental Management
24	Hazardous Chemical Substance Register and MSDS
25	Example of Monthly Health and Safety Report
26	Health and Safety Organogram
27	Occupational Health and Safety (Construction) Appointments – With Competencies
28	Certificates for all lifting equipment
29	Sample of all registers that will be used on site.
30	Copy of Construction Building Plans (A4)
31	Copy of the Occupational Health and Safety Act and Construction Regulations 2014

ANNEXURE F

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(Regulation 4 of the Construction Regulations. 2014)

NOTIFICATION OF CONSTRUCTION WORK

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

(b) Name and tel. No of principal contractor's contact person:

2. Principal contractor's compensation registration number:

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

(b) Name and tel. No of client's contact person or agent:

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

(b) Name and tel. No of designer(s) contact person:

5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 8(1).

6. Name/s of principal contractor's sub-ordinate supervisors on site appointed in terms of regulation 8(2).

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

8. Nature of the construction work:

9. Expected commencement date: _____

10. Expected completion date: _____

Units)

Health and Safety Specifications

11. Estimated maximum number of persons on the construction site.
Total: _____ Male: _____ Female: _____
12. Planned number of contractors on the construction site accountable to principal
Contractor: _____
13. Name(s) of contractors already selected.

Principal Contractor Date

Client's Agent (where applicable) Date

Client Date

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR PRIOR TO COMMENCEMENT OF WORK ON SITE.0

Copies:

1. Original to Department of Labour

ENVIRONMENTAL MANAGEMENT PLAN

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INTRODUCTION

This Environmental Management Plan (EMP) sets out in detail the approach that shall be taken by the Contractor in managing and controlling potential environmental impacts from our work activities on the Project, for meeting all relevant legal and contractual environmental requirements. Where necessary, this EMP will be revised to include recommended changes made by the Environmental Control Officer (ECO) based on EMP (Site specific requirements) approved by the Department of Environmental Affairs (DEA).

1.1. PROJECT DESCRIPTION

This Environmental Management Plan is concerned with borehole electrification. The proposed project is referred to address the following scope of work;

After a suitable location and site has been identified and acquired.

- Electrifying the borehole
- Digging holes to place poles
- Stringing and wiring.

1.2. REQUIREMENTS FOR AN EMP

An EMP is required to address the protection and ongoing management of the natural resources both on and off the site. The overarching goal is to ensure undue negative impacts of the proposed project are avoided and that positive impacts are enhanced. The Contractor will provide a basis for managing; mitigating and monitoring the environmental impacts associated with the proposed project and describes the environmental management roles and responsibilities of the project team.

OBJECTIVES OF THE EMP

This document provides appropriate mitigation measures designed to minimize or eliminate the significant adverse impacts that may be caused as a result of the construction work. Mitigation can be achieved in two ways, namely:

- By employing preventative measures during the construction phase, and
- By rehabilitating after construction is completed.

The primary objectives of the EMP are to:

Describe actions for achieving mitigation measures.

- Define organisational and administrative arrangements for environmental management and monitoring of the work contract, including the responsibilities of staff and co-ordination, liaison and reporting procedures.

- Ensure that discussions are held with site supervision staff, regarding pro-active environmental management, such that potential problems can be identified and mitigation measures adopted prior to rehabilitation work being carried out.
- Define procedures for environmental control, in the event of pollution (spillage) or similar events requiring action.

ENVIRONMENTAL POLICY STATEMENT

The Contractor specializes in electrical engineering works, based on the design, procurement, construction, commissioning, project management and site management. The Chief Executive Officer endorses the contractor's SHEQ Policy. The policy covers all aspects of the operations.

We are committed to delivering services with minimal impact to the environment through the following principles:

- Continual improvement;
- Prevention of pollution, waste management and resource conservation;
- To meet or exceed relevant environmental legislation, regulations and other requirements;
- Regular performance reviews to ensure that environmental objectives, targets and the requirements of Interested Parties are met;
- Provision of staff training to ensure understanding, implementation and development of these principles throughout our business - *NB, Refer to SHEQ Integrated policy.*

LIST OF LEGAL AND OTHER REQUIREMENTS

Work shall be according to the best industry practices, as identified in the project documents. This EMP forms an integral part of the contract, with particular reference to the prevention and mitigation of environmental impacts caused by construction activities associated with the project. Obligations imposed by the EMP are legally binding in terms of environmental statutory legislation and in terms of amendments to the Particular Conditions of Contract that pertain to this project. If any rights and obligations contained in this document contradict those specified in the standard or project specifications, then the latter shall prevail. The environmental legislation that will be consulted for the duration of the project are listed below, but not limited to;

- Atmospheric Pollution Prevention Act, Act 45 of 1965
- Environment Conservation Act, Act 73 of 1989
- National Environmental Management Act, Act 107 of 1998

- National Environmental Management: Air Quality Act 39 of 2004
- National Environmental Management: Biodiversity Act, Act 10 of 2004
- National Environmental Management: Protected Areas Act, Act 57 of 2003
- National Environmental Management: Waste Act, Act 59 of 2008
- Hazardous Substances Act, Act 15 of 1973
- National Water Act, Act 36 of 1998
- National Environmental Management: Biodiversity Act – Critically Endangered, Endangered, Vulnerable and Protected Species List

The contractor will access the most up to date environmental legislation via the Lexis Nexus website which it is subscribed to. The SHEQ Department will ensure that the relevant and most recent legislation is disseminated to the site personnel either by email or virtually to the site personnel.

MANAGEMENT & ROLES AND RESPONSIBILITIES

These guidelines form the basis for environmental management on site. Should these guidelines require modification or additions during the project, this shall be done at the discretion of the contractor's SHEQ Department and send for approval to the Client before any modifications will take effect. The Contractor SHEQ Department shall ensure that any modifications are communicated, explained to and discussed with all affected parties (i.e. the authorities, the contractors, The Contractor workers and the Client).

RESPONSIBLE PARTIES

- **Project Manager**

The Project Manager (PM) will be responsible for the overall implementation of the EMP. He is also responsible to ensure adequate resources are provided for the implementation of the EMP. The PM will nominate a representative on site as his environmental representative, known as the Contractors Environmental Officer. The Project Manager will issue site instructions to rectify any environmental non-compliance, based on the Environmental Officers findings.

- **Contractors Site Manager**

The Construction Site Manager (CSM) is responsible for the day-to-day overview of site practices in relation to environmental management. They will assign Site Agent, Foremen and Site Supervisors to assist the daily supervision and enforcement of the on-site mitigation measures. The CSM communicates directly with Environmental Officer and the PM on environmental management issues regularly.

- **Contractors Environmental Officer**

The Contract's Environmental Officer (EO) will be responsible, on behalf of the Project and Site Manager, to ensure that the EMP is implemented and complied with on site on a daily

basis. The Contractors EO is also responsible for maintaining environmental records and proper management of environmental emergency and preventive / corrective actions. The EO will deliver toolbox talk on environmental management to site staff regularly. The EO will also coordinate with the CSM and PM to ensure proper implementation of mitigation measures on environmental management. The EO will liaise with Mainstreams Environmental Representative in all matters relating to the implementation of the EMP.

MONITORING AND COMPLIANCE

The Contractor shall review the environmental management performance of the project on a regular basis. The Contractor shall be deemed not to have complied with the environmental mitigation measures if:

- There is evidence of negligence or recklessness resulting in the contravention of any of the clauses, both within and outside the boundaries of the construction site;
- Fails to comply with corrective or other instructions by The Contractor SHEQ Department.
- Fails to respond to complaints from the public;
- Staff is found poaching or entering neighbouring areas.

MONITORING OF THE ENVIRONMENTAL MANAGEMENT PLAN

The Contractor's SHEQ Department shall compile a monitoring plan in order to ensure that all of the environmental management measures in the EMP are a) implemented and b) effective. The aim of the plan shall essentially be to develop a cost effective approach to monitoring the project's environmental performance during construction.

PROMOTING ENVIRONMENTAL AWARENESS

Prior to construction, all The Contractor teams involved in work on the project will be briefed on their obligations towards environmental controls and methodologies in terms of this EMP (*Table 1 shows the outline of training requirements for all relevant staff*). An environmental awareness induction will be the initial form of environmental awareness to be conducted; thereafter briefings shall take the form of on-site toolbox talks and demonstration. It is the responsibility of The Contractor to identify specific environmental awareness topics to be communicated on site. The education/awareness programme will be aimed at all levels of management and construction workers within the team.

Table 1 – An Outline of Training Requirement for all Relevant Staff

Staff	Training Needs	Schedule / Frequency
Project Manager / Environmental Officer	Distribution of Environmental Management Plan	Beginning of Work
Relevant site supervisors / foremen identified by Project Manager	Mitigation and management measures specific to their scope of work	Before the staff commences the particular work
All site workers (including sub-contractor site staff)	General environmental management instructions / procedures, including site housekeeping, waste reduction, noise control, dust control, environmental management policy.	Induction before work commences

MONITORING AND AUDITING FRAMEWORK

The Contractor SHEQ Department shall compile a monitoring plan in order to ensure that all of the environmental management measures in the EMP are a) implemented and b) effective. The aim of the plan shall essentially be to develop a cost effective approach to monitoring the project's environmental performance during construction.

RECORD KEEPING, COMPLIANCE AND PENALTIES

Various records will be kept on site for monitoring purposes these include but not limited to:

- Environmental site attendance register
- Hazardous chemicals register;
- Waste disposal register;
- Oil/fuel spill register;
- Accident/Incident registers;
- Non-conformance registers

Records of non-compliance shall also be kept on record and will include the nature and magnitude of the non-compliance in a register, the action taken to discontinue the non-compliance, the action taken to mitigate its effects and the results of the actions. External complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a public complaints register and the response noted with the date and action taken. This record shall be submitted with the monthly reports and a verbal report given at the monthly site meetings

ENVIRONMENTAL ASPECTS AND IMPACTS

Environmental aspects could be defined as “those components of the company’s activities, products and services that are likely to interact with the environment”. Examples of what are considered environmental aspects are:

- Waste generation
- Water use operations
- Energy use operations
- Use of natural resources
- Product/waste disposal

Examples of what are considered environmental impacts are:

- Temporary loss of vegetation.
 - Increased risk in the spread of alien invasive vegetation.
 - Loss of conservation worthy species.
 - Habitat change and loss.
 - Noise and dust generation
 - Road erosion.
 - Reduction in ecological functioning of streams.
 - Wind and water erosion due to incorrect placement of the backfilled material and topsoil.
 - Soil, surface (i.e. storm-water) and groundwater contamination.
 - Spread of alien invasive species.
 - Soil destabilisation and topsoil loss.

Primarily, the aim is to recognise each environmental aspect or cause and effect and plan the activity in such a way that impacts are prevented. In the event that prevention is not practicable, or is not achieved because of misapplication, The Contractor shall immediately apply approved measures that shall limit and contain the magnitude, duration and intensity of the impact. The Contractor shall demonstrate capability of repairing and reinstating the damaged environment. General good construction practice shall play an important role in avoiding the occurrence of an impact.

ENVIRONMENTAL CONTROL AND MITIGATION MEASURES

10.1. SITE ESTABLISHMENT

10.1.1. Site Layout

The intended actions and programme for site establishment shall be submitted to the Project Manager including a plan showing the layout of the construction camp, including the positions of all buildings, stockpile and laydown areas, vehicle wash and service areas, fuel storage areas and other infrastructure. The Construction camp shall occupy as small an area as possible, and no site establishment shall be allowed within 100 m of any watercourse or water body unless otherwise approved by the Project Manager. The site layout shall be planned to facilitate ready access for deliveries, facilitate future works and to curtail any disturbance or security implications for neighbours. The final site layout shall be subject to the Project Manager's approval.

All site structures shall be of a temporary nature and shall be removed at the end of the contract. All site establishment components (as well as equipment) shall be located within previously disturbed areas where possible, and shall be positioned to limit visual intrusion on neighbours and the size of area disturbed.

10.1.2. Access

- Access to the site shall be controlled such that only vehicles and persons directly associated with the work at a particular site have access.
- Existing access roads to be used as far as possible to access the sites.
- Ensure staff arrive and depart promptly to prevent loitering of contractor's staff outside the designated working hours.
- No damage to existing gates and fences will be allowed
- All gates equipped with locks to prevent unauthorised access.

10.1.3. Eating Areas

- Designated eating areas shall be provided on site.
- These eating areas shall be clearly demarcated and shall be provided with bins with lids.
- Staff will be prohibited from consuming meals anywhere other than at these eating areas and that noise is limited.
- All adhere to COVID-19 safety regulations stipulated in the amended Disaster Management Act Regulations.

NB: Refer to SHE Plan

10.1.4. Workshops, storage areas and materials handling

- These areas shall be chosen so as to cause the least impact on the biophysical and social elements of the area.
- Citing of workshops, maintenance and refuelling sites and materials storage areas shall not be in the vicinity of sensitive sites e.g. wetlands, cultivated fields or drainage lines, or where local land owners can be disturbed.
- Storm water shall be diverted around the storage area. Storm water falling on the storage area shall be discharged if it meets the required water quality standards.
- Proper storage facilities, placed on an impermeable surface, shall be provided for the storage of oils, grease, fuels.
- In addition, hazard signs indicating the nature of the stored materials shall be displayed on the storage facility or container and Material Safety Data Sheets (MSDS's) will be made available for all hazardous chemicals. Before containers or storage facilities are erected, emergency procedures in the event of misuse or spillage that may negatively affect an individual or the environment will be in place.
- The storage facilities (including any tanks) shall be surrounded by a bund wall, in order to ensure that accidental spillage does not pollute local soil or water resources.
- The storage areas shall not be utilised for accommodation purposes.
- The storage area shall be kept tidy and the area shall be rehabilitated after use.
- An inventory of any hazardous chemicals/substances (including that within equipment) kept on site, along with a description of possible ill effects and treatment of health-related afflictions resulting from accidents, shall be kept in the storage area as well as by the appropriate manager. These areas shall be securely fenced.
- A notice board with the contact details of the responsible party shall be displayed at the gate to the storage area.
- Drip trays shall be inspected and emptied daily and serviced when necessary. In particular drip trays shall be closely monitored during rain events to ensure that they do not overflow. The contents must be disposed of at a recognised site.
- All repairs done on machinery using hydrocarbons as fuels or lubricants shall have a drip tray placed strategically to avoid incidental spillage.
- Workers shall be made aware of the health risks associated with any hazardous substances used (e.g. smoking near refuelling depots), and shall be provided with appropriate protective clothing / equipment in case of spillages or accidents.

10.1.5. Handling of hazardous chemical substances

- All personnel shall be informed of methods for handling, storage, installation, disposal and use of such materials, as per manufacturers' specifications during toolbox talks.
- MSDS shall be kept on site and readily available for all hazardous materials.
- Information on all hazardous materials shall be made available to the engineer.
- Access routes to transport hazardous materials through the site shall be confirmed with the engineer well in advance.
- Daily inspections of hazardous substance storage areas shall be done.
- All potential non-conformances shall be investigated and addressed immediately.
- In the event of contamination by hazardous materials all personnel will be informed and removed from the contaminated area.
- All spills shall be treated immediately and remedied as per the relevant MSDS.

10.1.6. Water for human consumption

- Water for human consumption shall be available at the site offices.
- Water is a scarce resource in Southern Africa and water shall be conserved wherever possible. Water conservation measures will be enforced on site and any water wastage will be attended to.

10.2. WATER & WASTEWATER MANAGEMENT

10.2.1. Sewerage treatment

- Chemical toilets will be provided on site but strict hygiene measures will be followed.
- The positioning of the chemical toilets shall be done in consultation with the Client and will be placed so that it cannot contaminate the natural streams and rivers. One toilet shall be provided per 30 staff members (for each sex) on site. Toilets shall be positioned within walking distance of wherever employees are employed on the site. Toilets shall be provided with locks and doors shall be secured to prevent the toilets from blowing over.

10.2.2. Storm Water Management

- Natural run-off from the construction areas and site establishment camps shall be discharged overland, following the natural discharge path determined by the undisturbed lie of the land. Whenever possible, storm water shall be directed towards storm water drains.

- All storm water drains used shall be protected to ensure that only sediment and pollutant free storm water is allowed to enter the drainage system.
- Natural surface run-off from adjacent areas shall be diverted away from offices, storage areas and construction sites.
- Downstream land and waterways shall be protected from erosion due to increased volumes and flow rate of storm water run-off from construction areas and site camps.
- Cable trenches and excavations shall be protected from the inflow of storm water and the duration of exposure shall be minimised.

10.3. WASTE MANAGEMENT

The Contractor intended methods for waste management and waste minimization shall be implemented from the outset of the contract. All personnel shall be instructed to dispose of all waste in the proper manner. A waste avoidance and minimization approach will be encouraged for the duration of the project. The following steps in order will be applied.

- Prevention – avoid and minimise waste
- Recycle – reuse and recover all general waste
- Treat – treatment in order to reduce toxicity reduce waste quantities
- Dispose – waste removal into a registered landfill facility

10.3.1. SOLID WASTE

- Solid waste shall be stored in an approved area e.g. waste bins with lids which are tip-proof.
- A refuse control system shall be established for the collection and removal of refuse to the satisfaction of the SHEQ Department.
- No waste shall be burned at the site offices or anywhere else on the site, including the approved solid waste disposal site.

10.3.2. LITTER

- No littering by construction workers shall be allowed. During the construction period, the facilities shall be maintained in a neat and tidy condition and the site shall be kept free of litter.
- Measures shall be taken to reduce the potential for litter and negligent behaviour with regard to the disposal of all refuse. The Contractor shall provide enough rubbish bins / skips for later safe disposal at approved sites.
- Littering, discarding or burying of any materials shall not be allowed on site.

10.3.3. HAZARDOUS WASTE

All medical-related waste e.g. respirators, utensils used by COVID-19 infected persons shall be removed from the site and disposed of at an authorized dumping site.

10.4. FAUNA AND FLORA MANAGEMENT

- All areas where rare and/or endangered species could occur are to be identified and avoided where possible.
- Prior to construction related activities, a search and rescue operation to collect species for rehabilitation must be conducted and kept alive in a nursery for rehabilitation purposes.
- Each indigenous tree or shrub removed through search and rescue operations must be replanted in the area it came from. Trees from within the servitude shall be planted outside of the permanent servitude and within the temporary servitude.
- No unauthorized clearing of vegetation.
- Construction activities and vegetation clearance will be reduced within the servitude.
- No construction related activities to impact upon areas outside of the project footprint.
- The condition of the vegetation within the servitude will be inspected on a regular basis and areas disturbed or exposed by construction activities will be re-established.
- No introduction of alien invasive vegetation species as a result of construction related activities will be allowed
- Chemical control of invasive species to be undertaken under the auspices of a Department of Agriculture, Forestry and Fisheries (DAFF) or Department of Water Affairs (DWA) and authorized Pest Control Officer (PCO).

10.5. SOIL MANAGEMENT

10.5.1. Topsoil

- Topsoil is to be stripped up to a depth of 300mm when it is in as dry a condition as possible in order to prevent compaction.
- The topsoil, including the existing grass cover is to be shallowly ripped (only the depth of the topsoil) before removal. This is to ensure that organic plant material, and the natural seed base is included in the stripping process
- Topsoil stockpiles shall not be stored higher than 1.5m and not for a period longer than 4 months.

- Should any fuel, oil or hydraulic fluids be spilled onto the soils, the extent of soil contamination shall be determined and polluted soil shall be removed to an approved disposal site and the area shall be rehabilitated.
- Soil contaminated by hazardous substances shall be disposed of at an approved.
- Soil contaminated by hazardous substances shall be disposed of at an approved Department of Water Affairs and Forestry waste disposal site
- Traffic and approved Department of Water Affairs waste disposal site.

10.5.2. Soil erosion

- Movement over stabilized areas shall be restricted and controlled, and damage to stabilized areas shall be repaired and maintained.
- To prevent soil erosion or run-off storm water will be diverted away from exposed areas and soil stockpiles. Ensure storm water runoff from exposed areas and un-vegetated soil stockpiled passes through settling ponds to trap sediment prior to the water flowing off site.
- The area will be accessed and the best practicable method will be used for erosion control. A method statement will be submitted for approval.

10.6. DUST MANAGEMENT

- The Contractor shall take all reasonable measures to minimize the generation of dust as a result of construction activities to the satisfaction of the environmental control officer.
- Water used for dust suppression shall be used in quantities small enough not to generate run-off and cause erosion
- Excavation, handling and transport of erodible materials shall be avoided under high wind conditions or when a visible dust plume is present.
- Where possible, soil stockpiles shall be located in sheltered areas where they are not exposed to the erosive effects of the wind. Where erosion of stockpiles becomes a problem, erosion control measures shall be implemented at the discretion of the environmental manager.

10.7. NOISE MANAGEMENT

- All construction operations to only occur during daylight hours if possible.
- Construction staff to be given training in actions to minimize noise.
- Where possible, noisy operations should be combined so that they occur at the same time.
- All construction vehicles, plant and equipment must be properly maintained to avoid creation of unnecessary additional noise.
- Where possible, truck traffic routes must be located where they will cause the least noise interference to the surrounding communities.

10.8. FIRE PREVENTION AND CONTROL

- Smoking shall be prohibited in the vicinity of flammable substances.
- The Contractor shall ensure that adequate fire-fighting equipment is available on site, in particular where flammable substances are being stored or used.
- Any welding / grinding or other sources of heating of materials shall be done in a controlled environment and under appropriate supervision, in such a manner as to minimise the risk of fires and/or injury to staff.

10.9. HERITAGE RESOURCES

- If any heritage artefacts are found on site work will be ceased.
- The discovery shall be reported to Mainstream Renewable Power who in turn will report to the SAHRA or LIHRA immediately.
- Construction in that area will only commence once a permit has been attained from SAHRA for the removal of archaeological material from site.
- All heritage features encountered will be avoided and protected unless otherwise instructed by Mainstream Renewable Power (in consultation with a heritage specialist).

10.10. HEALTH AND SAFETY

- Workers shall be equipped with adequate personal protective equipment (PPE) as required by the specific plant. The PPE will be in the form of work suits, dust masks, face shields, hand gloves, covered shoes.

- The Contractor shall maintain and update all safety records.
- The drivers shall adhere to the speed limit and the rules of the road.
- The drivers shall reduce speed and exercise caution on the access road to the site.

10.11. EMERGENCY ISSUES

- Standard emergency reporting procedures will be adopted
- Ensure that all personnel are aware of emergency reporting procedures and their responsibilities.
- Ensure immediate clean-up of any spills in accordance with relevant legislation.
- Telephone numbers of emergency services, including the local fire-fighting service, shall be conspicuous.

10.12. REHABILITATION

- .Once work has been completed, all redundant infrastructure, waste and construction materials shall be removed from site by The Contractor and disposed of in an appropriate manner, i.e. at a registered Department of Water Affairs waste site.
- All rehabilitation and associated activities shall be confined to the identified site.
- A rehabilitation plan will be developed by The Contractor and submitted to the Environmental Control Officer.

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

C4 SITE INFORMATION

C4. Site Information

Selwane is a large township lying 30 km outside Phalaborwa in Mopani District in the Limpopo province of South Africa. It's nearest neighbouring townships are Lulekani, Makhushane, Maseke and Mashishimale on the R71 road to Gravelotte. It is next to the Kruger National Park on the north western part of the Limpopo province previously Northern Transvaal.

C4.1 Description of Site and Access

Selwane Village is located about 30km in an Easterly direction from Phalaborwa town. The location is as shown in Fig 1 below:

VILLAGE	LATITUDE	LONGITUDE
Selwane Village	23°41'45.2"S	30°57'35.8"E

The site slopes from west to east, with gradients ranging from 5% to 2%. The development will be situated on municipal land covering an area approximately 10.5 hectares in total. The site slopes generally from west towards the North East with stormwater ultimately draining to a non-perennial tributary that flows further down to the east of the development.

C 4.2 Contractor's Inspection of the Site

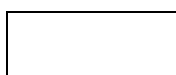
The contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection there with and to have satisfied himself before submitting his tender as to

1. Know the form and nature of the site and its surroundings, including subsurface conditions.
2. The hydrological and climatic conditions
3. The extent and nature of work and materials necessary for the execution and completion of the works.
4. The means of access to the site and the accommodation he may require

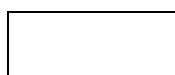
C4.1



Contractor



Witness 1



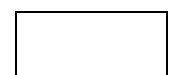
Witness 2



Employer



Witness 1



Witness 2

And, in general, shall be deemed to have obtained all information (as far as is practicable) as to risks, contingencies and all other circumstances which may influence or affect his tender.

C4.3 Material Properties

Excavation was done on the site. The soil has high resistivity.

C4.4 Ground Water

The depth of the water table is unknown as no groundwater was encountered in any of the test pit excavations. It is not expected that groundwater will be problematic on this site.

C4.5 Contractor's

Tenderers shall be deemed to have fully satisfied themselves as to the site and geological conditions that pertain to the site of works before submitting their tenders.

C4.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

BA-PHALABORWA LOCAL MUNICIPALITY



CONTRACT NO. 10/20/21

ELECTRIFICATION OF SELWANE (105 UNITS)

C5 BOOK OF DRAWINGS

The following drawings are applicable to this contract:

LIST OF DRAWINGS	
ELECTRIFICATION OF SELWANE (105 UNITS)	
DRAWING NUMBER	DESCRIPTION
SLN/01/01	SELWANE ELECTRICAL RETICULATION SHEEET 1 OF4
SLN/01/02	SELWANE ELECTRICAL RETICULATION SHEEET 2 OF4
SLN/01/03	SELWANE ELECTRICAL RETICULATION SHEEET 3 OF4
SLN/01/04	SELWANE ELECTRICAL RETICULATION SHEEET 4 OF4

C4.1

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

LOCALITY MAP



C4.2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SELWANE TOWNSHIP

SILWANA'S LOCATION NO.719-LT

SELWANA TOWNSHIP

ELECTRIFICATION

LEGEND	
SYMBOL	DESCRIPTION
	LV POLE WITH STAY
	LV POLE WITH STRUT
	LV POLE WITH SHORT STAY
	LV POLE WITH FLYING STAY
	MV POLE WITH STAY
	MV POLE WITH STRUT
	MV POLE WITH SHORT STAY
	MV POLE WITH FLYING STAY
	TRANSFORMER
	LV POLE
	MV POLE
	SHARING POLE
	KICKER POLE (5.7, 9M)
	LINK/BREAKER/SEC./METER UNIT
	MV FUSE
	LV FUSE
	CABLE JOINT (MV-LV)
	MV CROWS FEET / EARTH SPIKE
	LV CROWS FEET / EARTH SPIKE
	SA.
	HIGH MAST
	ABC 35MM 1 PHASE
	ABC 35MM 2 PHASE
	ABC 35MM 3 PHASE
	ABC 70MM 3 PHASE
	ABC 35MM - STREET LIGHT CABLE
	ABC 70MM - STREET LIGHT CABLE
	LV FOX COND.
	LV GOPHER COND.
	LV HARE COND.
	LV MINK COND.
	LV SQUIRREL COND.
	LV WOLF COND.
	MV MINK CONDUCTOR
	MV FOX DUAL PHASE
	EXISTING DISMANTLE
	MV SQUIRREL CONDUCTOR
	MV FOX CONDUCTOR, NEW
	MV WOLF CONDUCTOR
	MV DUAL PHASE (F/G/H/M/SO/W)
	SERVICE CONNECTIONS 4/10/16MM
	SERV. CONN. U/G 4/10/16MM
	LV CONDUCTOR PHASING
	POLE BOX CONNECTION PHASE
	STREET LIGHT
	STREET LIGHT CABLE
	TELKOM LINE
	TELKOM POLE


CODE POSITION	1 - POLES	2 - MV CON. - ANCHORS	3 - LV CON. - ANCHORS	4 - LV SERVICE	5 - ABL. EQUIP.
A	UNDEFINED	UNDEFINED	UNDEFINED	UNDEFINED	UNDEFINED
B	POLE (1M 100 1700 TOP WOODEN) (145)	A 300 3500 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	A 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	A 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	A 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
B	POLE (1M 100 1700 TOP WOODEN) (145)	B 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	B 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	B 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	B 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
A	POLE (1M 100 1700 TOP WOODEN) (145)	C 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	D 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	E 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	F 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
C	POLE (1M 100 1700 TOP WOODEN) (145)	D 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	E 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	F 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	G 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
		H 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	I 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	J 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	K 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
		L 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	M 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	N 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	O 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
		P 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	Q 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	R 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	S 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
		T 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	U 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	V 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	W 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
		X 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	Y 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	Z 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	AA 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)
		AB 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	AC 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	AD 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)	AE 300 3000 3000 3000 SPEC. 00 00000 INTERM. (17000) (145)

INFRA PROJECT AFRICA

DIENS / SERVICE
SELWANE ELECTRICAL RETICULATION
"SHEET 1 OF 4"

TEK TITEL / DRW TITLE
MEDIUM AND LOW VOLTAGE LAYOUT
PHASE 2 + 1.3KV.A.D.M.D. PER STAND

ONTWERP/DESIGNED K MAMPA 066 1222 947	NAGESKEN/CHECKED M. TSAHA, PR.ENG - 066 1222 947
GOEDGEKUR/DRAWN K MAMPA 066 1222 947	GOEDGEKUR/APPROVED M. TSAHA, PR.ENG - 066 1222 947
DATUM/DATE JANUARY 2021	CAD STORE NR/STOOR NO. SELWANE 8 CAD/PH22/PHE



Eskom Distribution

SELWANE "PHASE 2"

SLN/01/01

158 STANDS

NTS

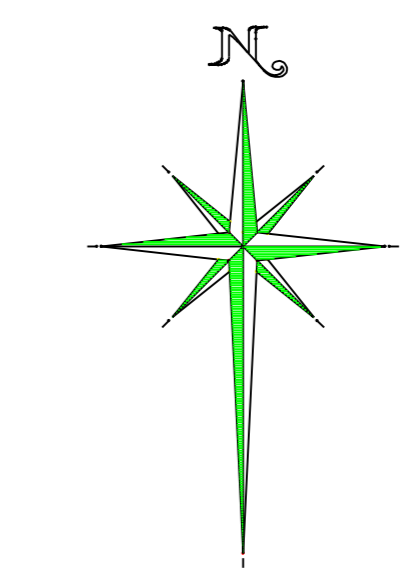
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SCALE: NTS

PROJECT: SELWANE ELECTRICAL RETICULATION

NO. OF SHEETS: 4

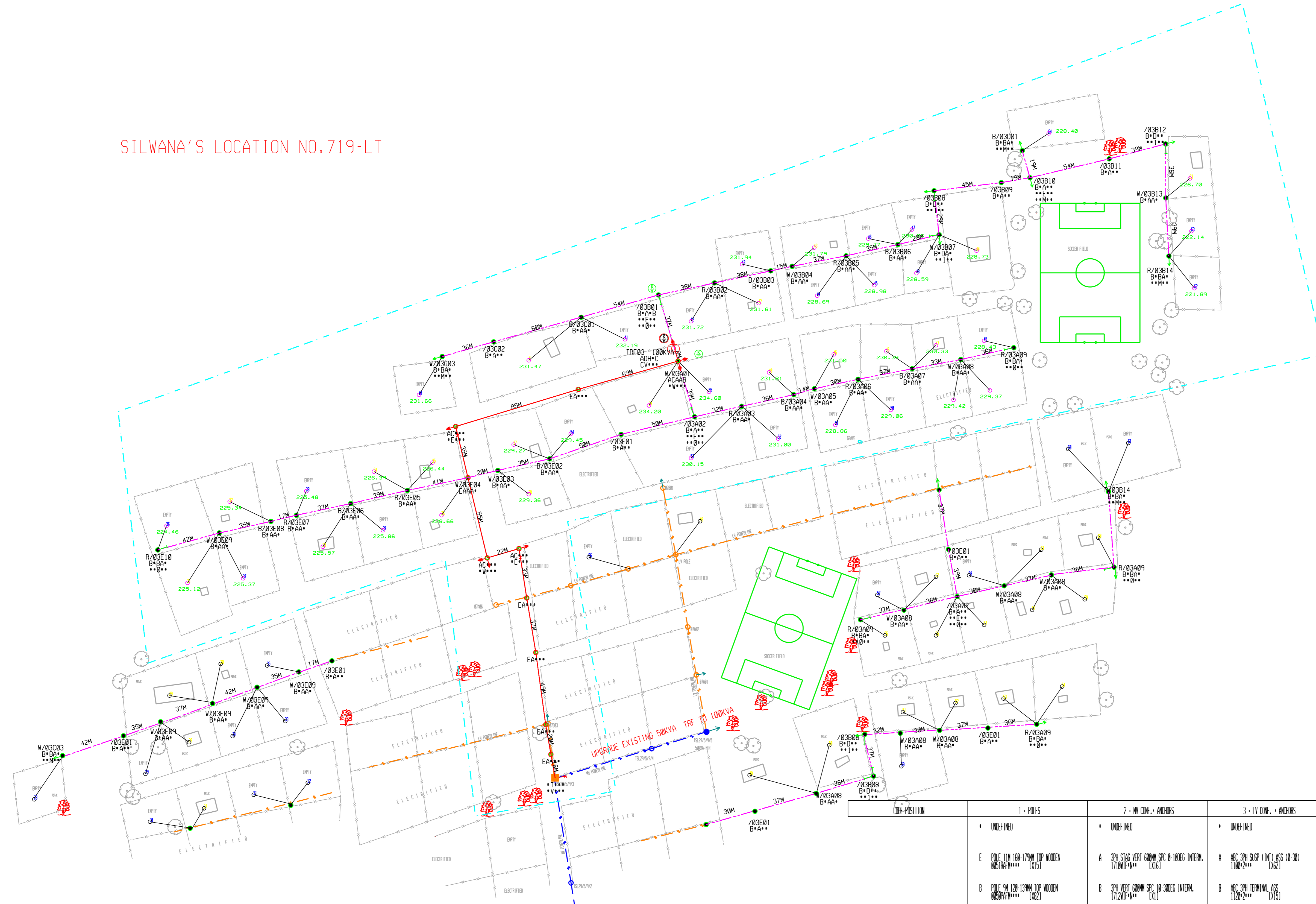
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158 STANDS

SELWANE TOWNSHIP

SILWANA'S LOCATION NO.719-LT

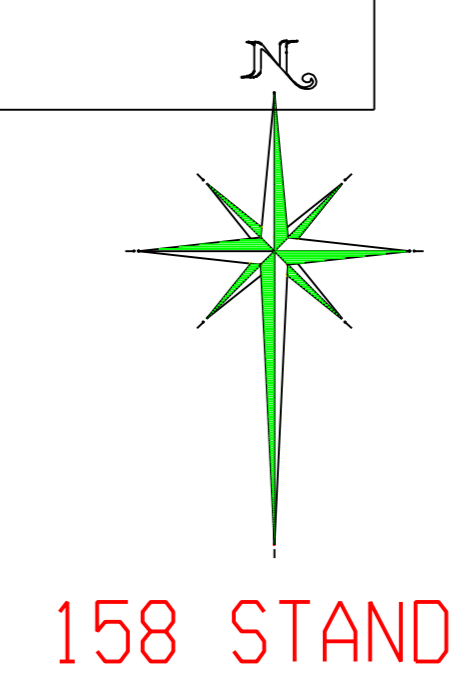


LEGEND	
SYMBOL	DESCRIPTION
	LV POLE WITH STAY
	LV POLE WITH STRUT
	LV POLE WITH SHORT STAY
	LV POLE WITH FLYING STAY
	MV POLE WITH STAY
	MV POLE WITH STRUT
	MV POLE WITH SHORT STAY
	MV POLE WITH FLYING STAY
	TRANSFORMER
	LV POLE
	MV POLE
	SHARING POLE
	KICKER POLE (5,7,9M)
	LINK/BREAKER/SEC./METER UNIT
	MV FUSE
	LV FUSE
	CABLE JOINT(MV-LV)
	MV CROWS FEET / EARTH SPIKE
	LV CROWS FEET / EARTH SPIKE
	SA.
	HIGH MAST
	ABC 35MM 1 PHASE
	ABC 35MM 2 PHASE
	ABC 35MM 3 PHASE
	ABC 70MM 3 PHASE
	ABC 35MM STREET LIGHT CABLE
	ABC 70MM STREET LIGHT CABLE
	LV FOX COND.
	LV GOPHER COND.
	LV HARE COND.
	LV MINK COND.
	LV SQUIRREL COND.
	LV WOLF COND.
	MV MINK CONDUCTOR
	MV MINK CONDUCTOR, EXISTING
	MV MINK DUAL PHASE, EXISTING DISMANTLE
	MV SQUIRREL CONDUCTOR
	MV FOX CONDUCTOR, NEW
	MV WOLF CONDUCTOR
	MV DUAL PHASE (F/G/H/M/SQ/W)
	SERVICE CONNECTIONS 4/10/16MM
	SERV. CONN. U/G 4/10/16MM
	LV CONDUCTOR PHASING
	POLE BOX CONNECTION PHASE
	STREET LIGHT
	STREET LIGHT CABLE
	TELKOM LINE
	TELKOM POLE

INFRA PROJECT AFRICA

CODE POSITION	1 - PILES	2 - MV CON. - ANCHORS	3 - LV CON. - ANCHORS	4 - LV SERVICE	5 - AUX. EQUIP.
E	POLE 10M FOR 17MM TOP WOODEN	2P1 STAG WERT GROM SPEC B INDES INTERM	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)
B	POLE 10M FOR 17MM TOP WOODEN	2P1 STAG WERT GROM SPEC B INDES INTERM	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)
A	POLE 10M FOR 17MM TOP WOODEN HARD MACH	2P1 STAG WERT GROM SPEC B INDES INTERM	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)
C	POLE 10M FOR 17MM TOP WOODEN HARD MACH	2P1 STAG WERT GROM SPEC B INDES INTERM	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)	ABC 3P1 STAG (INT) GSS (R-20)
I	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N
V	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N
W	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N
E	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N
F	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N
G	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N
H	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N
I	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N	2 X STAG CONVENTIONAL MV F-G-I-J-K-L-M-N

ELECTRIFICATION



158 STANDS

DIENS / SERVICE
SELWANE ELECTRICAL RETICULATION
 "SHEET 2 OF 4"

TEK TITEL / DRW TITLE
MEDIUM AND LOW VOLTAGE LAYOUT
PHASE 2 + 1.3KVA A.D.M.D. PER STAND

ONTWERP/DESIGNED
 K MAMPA 066 1222 947

MAKES BEN/CHECKED
 M. TSAHA, PR.ENG 066 1222 947

TEK/TEKNIK/DRAWN
 K MAMPA 066 1222 947

GOEDGEKUR/APPROVED
 M. TSAHA, PR.ENG 066 1222 947

DATE/DATE
 JANUARY 2021

CAD STORE NR./STOOR NO.
 SELWANE & CAD/PH22/HMR

SA-PHALABORWA LOCAL MUNICIPALITY

ESKOM Distribution

SELWANE "PHASE 2"

SLN/01/01

NTS

SELWANE TOWNSHIP

SILWANA'S LOCATION NO. 719-LT



CODE POSITION	1 - POLES	2 - MV CONE. - ANCHORS	3 - LV CONE. - ANCHORS	4 - LV SERVICE	5 - AUX. EQUIP.
A	UNDEFINED	UNDEFINED	UNDEFINED	UNDEFINED	UNDEFINED
E	POLE 11M 17M 17M TOP WOODEN 085104*** (1815)	20% STAG WERT GRDM SPEC W INDEG. INTERN. 171000*** (1816)	ABC 20% STAG (1M) ASS (P 30) 171000*** (1827)	A P/LI 20% 1.4 MVA 25/10MM BOLT 085202*** (1867)	A 100% 11KV INLAND MIN. 20% 2.5M 085202*** (1811)
B	POLE 9M 12M 12M TOP WOODEN 085104*** (1817)	20% WERT GRDM SPEC W 300EG INTERN. 171200*** (181)	ABC 20% TERMINAL ASS 171200*** (1825)		B 1.1.1 CONDUIT 3 POINT STAR EARTH (CONDUIT) 085202*** (182)
A	POLE 11M 12M 12M WOODEN HARD WOOD 085104*** (1817)	20% WERT GRDM SPEC W 300EG STRAIN 171200*** (1811)	D ABC 20% STRAIN ASS 100% 10M 171200*** (1811)		C 100% 11KV INLAND MIN. 20% 2.5M 085202*** (1811)
C	POLE 9M 12M 12M WOODEN HARD WOOD 085104*** (181)	20% WERT GRDM SPEC 20M 171200*** (181)	E ABC 20% 1 OFF FROM INT 171200*** (181)		D 100% 11KV INLAND MIN. 20% 2.5M 085202*** (1811)
		I 20% WERT GRDM SPEC 1 OFF 171200*** (181)	H 2 ABC 20% TERMINATIONS AT TOP 2 X 171200*** (181)		E 100% 11KV INLAND MIN. 20% 2.5M 085202*** (1811)
		V STAG CONVENTIONAL W/F GLASS - HARD SOIL 084104*** (181)	M STAG CONVENTIONAL LV POLE - HARD SOIL 084104*** (1815)		
		W 2 X STAG CONVENTIONAL W/F GLASS - HARD SOIL 2 X 084104*** (181)	N 2 X STAG CONVENTIONAL LV POLE - HARD SOIL 2 X 084104*** (182)		
		E MV STAG - MV STAG 084104*** (181)	B STAG POLE LV W - HARD SOIL 084104*** (181)		
		K STREET POLE SKINEL W/TEN - HARD SOIL 085104*** (181)	I STREET POLE LV W - 20M STAG 084104*** (181)		

LEGEND	
SYMBOL	DESCRIPTION
	LV POLE WITH STAY
	LV POLE WITH STRUT
	LV POLE WITH SHORT STAY
	LV POLE WITH FLYING STAY
	MV POLE WITH STAY
	MV POLE WITH STRUT
	MV POLE WITH SHORT STAY
	MV POLE WITH FLYING STAY
	TRANSFORMER
	LV POLE
	MV POLE
	SHARING POLE
	KICKER POLE (5.7, 9M)
	LINK/BREAKER/SEC./METER UNIT
	MV FUSE
	LV FUSE
	CABLE JOINT(MV-LV)
	MV CROWS FEET / EARTH SPIKE
	LV CROWS FEET / EARTH SPIKE
	SA.
	HIGH MAST
	ABC 35MM 1 PHASE
	ABC 35MM 2 PHASE
	ABC 35MM 3 PHASE
	ABC 70MM 3 PHASE
	ABC 35MM - STREET LIGHT CABLE
	ABC 70MM - STREET LIGHT CABLE
	LV FOX COND.
	LV GOPHER COND.
	LV HARE COND.
	LV MINK COND.
	LV SQUIRREL COND.
	LV WOLF COND.
	MV MINK CONDUCTOR
	MV MINK CONDUCTOR, EXISTING
	MV MINK DUAL PHASE - EXISTING DISMANTLE
	MV SQUIRREL CONDUCTOR
	MV FOX CONDUCTOR, NEW
	MV WOLF CONDUCTOR
	MV DUAL PHASE(F/G/H/M/SQ/W)
	SERVICE CONNECTIONS 4/10/16MM
	SERV. CONNOC. U/G 4/10/16MM
	LV CONDUCTOR PHASING
	POLE BOX CONNECTION PHASE
	STREET LIGHT
	STREET LIGHT CABLE
	TELKOM LINE
	TELKOM POLE

INFRA PROJECT AFRICA

DIENS / SERVICE
SELWANE ELECTRICAL RETICULATION
 "SHEET 3 OF 4"

TEK TITEL / DRW TITLE
MEDIUM AND LOW VOLTAGE LAYOUT
PHASE 2 + 1.3KVA A.D.M.D. PER STAND

ONTWERP/DESIGNED
 K MAMPA 066 1222 947

NAGES/EN/CHECKED
 M. TSAHA, PR.ENG - 066 1222 947

GETEKEN/DRAWN
 K MAMPA 066 1222 947

GOEDGEKEUR/APPROVED
 M. TSAHA, PR.ENG - 066 1222 947

DATUM/DATE
 JANUARY 2021

CAD STORE NR/STOOR NO.
 SELWANE & CAD/PH22/HMR



01/21	SI-PHILABURH LOCAL MUNICIPALITY	E.P. J.M.	REFERENCE DRAWINGS
DATE	REGISTERED	BY	VERWENSTER/REFERENCE
INDEX	REF./INDEX/KEY	BY	VERWENSTER/REFERENCE
INDEX	REF./INDEX/KEY	BY	VERWENSTER/REFERENCE

Eskom
Distribution

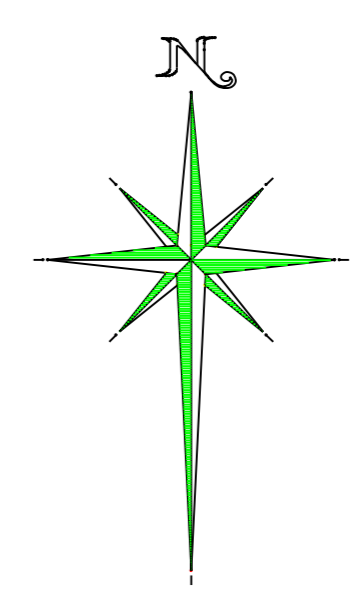
SELWANE
"PHASE 2"

SCALE
 NTS

APPROVED
 GOEDGEKEUR

SCALE
 NTS

NO.
 SLN/01/01

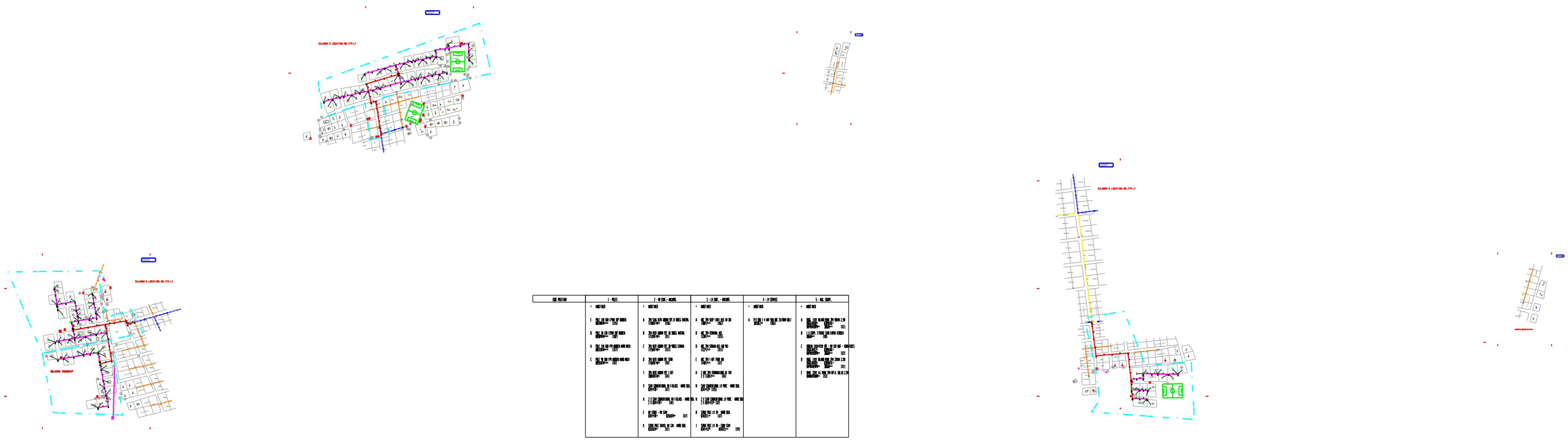


158 STANDS

ELECTRIFICATION

SELWANE TOWNSHIP

ELECTRIFICATION



NO.	DESCRIPTION	UNIT	QUANTITY
1	ABC 35MM 1 PHASE	M	150
2	ABC 35MM 2 PHASE	M	150
3	ABC 35MM 3 PHASE	M	150
4	ABC 70MM 3 PHASE	M	150
5	ABC 35MM STREET LIGHT CABLE	M	150
6	ABC 70MM STREET LIGHT CABLE	M	150
7	LV FOX COND.	M	150
8	LV GOPHER COND.	M	150
9	LV HARE COND.	M	150
10	LV MINK COND.	M	150
11	LV SQUIRREL COND.	M	150
12	LV WOLF COND.	M	150
13	MV MINK CONDUCTOR	M	150
14	MV MINK CONDUCTOR, EXISTING	M	150
15	MV MINK DUAL PHASE EXISTING DISMANTLE	M	150
16	MV SQUIRREL CONDUCTOR	M	150
17	MV FOX CONDUCTOR, NEW	M	150
18	MV WOLF CONDUCTOR	M	150
19	MV DUAL PHASE (F/G/H/M/SO/W)	M	150
20	SERVICE CONNECTIONS 4/10/16MM	M	150
21	SERV. CONNEX. U/G 4/10/16MM	M	150

LEGEND	
SYMBOL	DESCRIPTION
	LV POLE WITH STAY
	LV POLE WITH STRUT
	LV POLE WITH SHORT STAY
	LV POLE WITH FLYING STAY
	MV POLE WITH STAY
	MV POLE WITH STRUT
	MV POLE WITH SHORT STAY
	MV POLE WITH FLYING STAY
	TRANSFORMER
	LV POLE
	MV POLE
	SHARING POLE
	KICKER POLE (5,7,9M)
	LINK/BREAKER/SEC./METER UNIT
	MV FUSE
	LV FUSE
	CABLE JOINT (MV-LV)
	MV CROWS FEET / EARTH SPIKE
	LV CROWS FEET / EARTH SPIKE
	SA.
	HIGH MAST
	ABC 35MM 1 PHASE
	ABC 35MM 2 PHASE
	ABC 35MM 3 PHASE
	ABC 70MM 3 PHASE
	ABC 35MM STREET LIGHT CABLE
	ABC 70MM STREET LIGHT CABLE
	LV FOX COND.
	LV GOPHER COND.
	LV HARE COND.
	LV MINK COND.
	LV SQUIRREL COND.
	LV WOLF COND.
	MV MINK CONDUCTOR
	MV MINK CONDUCTOR, EXISTING
	MV MINK DUAL PHASE EXISTING DISMANTLE
	MV SQUIRREL CONDUCTOR
	MV FOX CONDUCTOR, NEW
	MV WOLF CONDUCTOR
	MV DUAL PHASE (F/G/H/M/SO/W)
	SERVICE CONNECTIONS 4/10/16MM
	SERV. CONNEX. U/G 4/10/16MM
	LV CONDUCTOR PHASING
	POLE BOX CONNECTION PHASE
	STREET LIGHT
	STREET LIGHT CABLE
	TELKOM LINE
	TELKOM POLE

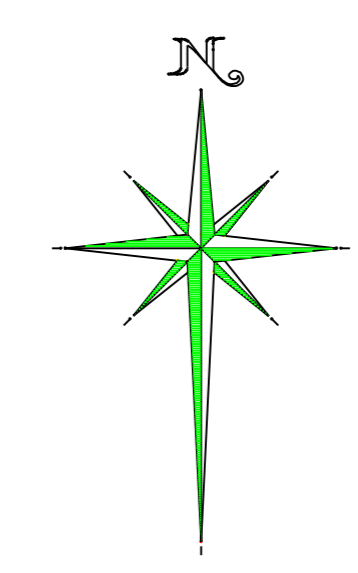
INFRA PROJECT AFRICA

DIENS / SERVICE
SELWANE ELECTRICAL RETICULATION
 'SHEET 4 OF 4'

TEK TITEL / DRW TITLE
MEDIUM AND LOW VOLTAGE LAYOUT
PHASE 2 + 1.3KVA A.D.M.D. PER STAND

ONTWERP/DESIGNED: **K MAMPA 066 1222 947** NABESTEM/CHECKED: **M. TSAHA, PR.ENG. - 066 1222 947**
 GETEKEN/DRAWN: **K MAMPA 066 1222 947** GOEDGEKEUR/APPROVED: **M. TSAHA, PR.ENG. - 066 1222 947**

DATUM/DATE: **JANUARY 2021** CAD STORE NR/STOOR NO.: **SELWANE & CAD/PH22/1982**



158 STANDS

	SELWANE "PHASE 2"
APPROVED: GOEDGEKEUR SCALE: NTS	REFERENCE DRAWINGS: SLN/01/01 DATE: 01/01/2021