

MATJHABENG LOCAL MUNICIPALITY



MATJHABENG LOCAL MUNICIPALITY

BID DOCUMENT

BID NO.: RFP/01/2023-24

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CLOSING DATE & TIME: WEDNESDAY 2023/08/30, AT 12:00

TECHNICAL ENQUIRIES	BIDDING RELATED ENQUERIES
<p>INFRASTRUCTURE DIVISION : ELECTRICAL SECTION Mr. Mbalekelwa Tshabalala</p> <p>MATJHABENG LOCAL MUNICIPALITY CORNER RYK AND STATEWAY WELKOM 9460</p> <p>Tel: 082 331 8741 Email: mbalekelwat@matjhabeng.co.za</p>	<p>FINANCE DIVISION: SUPPLY CHAIN MANAGEMENT Mr. Lesibo Sebatane</p> <p>MATJHABENG LOCAL MUNICIPALITY CORNER RYK AND STATEWAY WELKOM 9460</p> <p>Tel:(057) 391 3911 E-mail: lesibos@matjhabeng.co.za</p>

NAME OF BIDDER (BIDDING ENTITY): _____

TELEPHONE NUMBER: _____

FAX NUMBER: _____

THE OFFERED TOTAL OF THE PRICES INCLUDING VALUE ADDED TAX IS:
(As per Form of Offer and Acceptance and Bill of Quantities)

R..... (In figures)

LIST OF PROJECT DOCUMENTS

The Tender Documents for this Contract comprise the following:

- 1: *General Conditions of Contract for Construction Works*, Third Edition, 2015, issued by South African Institution of Civil Engineering, which the Tenderer shall purchase himself.

- 2: The SANS *Standardized Specification for Civil Engineering Construction*, prepared by Standards South Africa, which the Tenderer shall purchase himself.

- 3: The Project Document, containing the Tender Notice, Conditions of Tender, Tender Data, Returnable Schedules, General and Particular Conditions of Contract, Project Specifications, Pricing Schedule, Form of Offer and Site Information, is issued by the Employer. The Employer's Form of Acceptance and any correspondence from the selected Tenderer, Performance Security and all Addenda issued during the period of tender will also form part of this document once a successful tenderer has been appointed.

1 and 2 are available from the following organisations (as applicable):

- **CESA, PO Box 68482, Bryanston, 2021. Tel: 011 463 2022 Fax: 011 463 7383, Email: general@cesa.co.za**
- **SAICE, Private Bag X200, Halfway House, 1685. Tel: 011 805 5947/8, Email: civilinfo@saice.org.za**
- **SAFCEC**
- **South African Bureau of Standards**

MATJHABENG LOCAL MUNICIPALITY

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM

CONTRACT RFP/01/2023-24

CONTENTS OF VOLUME 1

DESCRIPTION	COLOUR
CONTENTS LIST	White
CHECKLIST	White
PORTION 1: TENDER	
Part T1 Tendering procedures	White
Section T1.1 Tender notice and invitation to tender	White
Section T1.2 Tender data	Pink
Section T1.2 Standard conditions of tender	Pink
Part T2 Returnable documents	Yellow
Section T2.1 List of returnable documents	Yellow
Section T2.2 Returnable schedules	Yellow
PORTION 2: CONTRACT	
Part C1 Agreements and contract data	White
Section C1.1 Forms of offer and acceptance	White
Section C1.2 Contract data	White
Section C1.3 Form of Guarantee	White
Section C1.4 Guarantee (Cash Deposit)	White
Section C1.5 Occupational Health and Safety Agreement	White
Part C2 Pricing Data	Yellow
Section C2.1 Pricing Instructions	Yellow
Section C2.2 Bill of Quantities	Yellow
Section C2.3 Calculations of Tender Sum	Yellow
Part C3 Scope of work	Blue
Section C3.1 Description of the Works	Blue
Section C3.2 Engineering	Blue
Section C3.3 Procurement	Blue
Section C3.4 Construction	Blue

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Section C3.5	Management	Blue
Section C3.6	Particular Variations and Specifications and Additions to Standard Specifications	Blue
Section C3.7	Health and Safety: Specification AO	Blue
Part C4	Site Information	Green
Section C4.1	Annexure: Site Information	Green
APPENDICES:		
Appendix A	Issued - Tender Drawings	White

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

CHECKLIST

To be Completed by all Tenderers

DESCRIPTION	OUTCOME IF NOT COMPLIED WITH	PLEASE TICK
A tax compliance verification pin on a SARS letterhead - Part T2 Section T2.1	No contract shall be awarded upon failure to submit a tax compliance verification pin on a SARS letterhead certifying that the taxes of that person to be in order or that suitable arrangements have been made with SARS	<input type="checkbox"/>
Copy of VAT Registration Certificate - Part T2 Section T2.1	No contract shall be awarded upon failure to submit a VAT Registration Number. Only required if VAT Registration number is not indicated on Tax Clearance Certificate	<input type="checkbox"/>
Copy of Certificate of Incorporation (if tenderer is a Company) - Part T2 Section T2.1	Non-responsive, tender eliminated	<input type="checkbox"/>
Copy of Founding Statement (if tenderer is a Closed Corporation) - Part T2 Section T2.1	Non-responsive, tender eliminated	<input type="checkbox"/>
Copy of Partnership Agreement (if tenderer is a Partnership) - Part T2 Section T2.1	Non-responsive, tender eliminated	<input type="checkbox"/>
Certified copy of Identity Document (if tenderer is a One-man concern) - Part T2 Section T2.1	Non-responsive, tender eliminated	<input type="checkbox"/>
Joint Venture Agreement (if the tenderer is a joint venture) - Part T2 Section T2.1	Non-responsive, tender eliminated	<input type="checkbox"/>
The CIDB certificate of contractor's registration, Part T2 Section T2.1	Non-responsive, tender eliminated	<input type="checkbox"/>
Bank Details (completed in full) – Part T2 Section T2.1 & T2.2	Information or bank history not available. (Evaluated as possible risk)	<input type="checkbox"/>
Form of Offer - Part C1.1	Non responsive, tender eliminated	<input type="checkbox"/>
Schedule of Quantities (All items in black ink) - Section C2.2	Refer to pricing Instructions	<input type="checkbox"/>
Calculation of Tender Sum - Section C2.3	Refer to pricing Instructions	<input type="checkbox"/>
Works Previously Executed - Section T2.2.6	Regarded as tender with no experience	<input type="checkbox"/>
Present Commitments - Section T2.2.7	Regarded as tender with no experience	<input type="checkbox"/>
Supervisory Personnel - Section T2.2.13	No designated personnel, possible experience risk	<input type="checkbox"/>
Labour Utilisation - Section T2.2.14	Regarded as tenderer with limited experience and understanding of contract scope	<input type="checkbox"/>
Compliance with OHSA (Act 85 of 1993) - Section T2.1 & T2.2	Regarded as a tenderer with limited ability and available resources to comply with the OHSA act	<input type="checkbox"/>
Plant and Equipment - Section T2.2.16	Regarded as tenderer with limited experience and understanding of contract scope	<input type="checkbox"/>
Subcontractors & Emerging Subcontractors - Section T2.2.17	All work to be carried out by main Contractor or joint entity	<input type="checkbox"/>
Authority of Signatory & Certified Resolution - Section T2.2.5	Non responsive, tender eliminated	<input type="checkbox"/>
B-BBEE Level – Section T2.2.18	Tenderer not tendering for PPPFA points	<input type="checkbox"/>
Declaration in terms of the Municipal Finance Management Act - Section T2.2.	Non-responsive, tender eliminated	<input type="checkbox"/>
Declaration of Interest - Section T2.1	Non-responsive, tender eliminated	<input type="checkbox"/>
Property Rates Clearance: Copy of latest Municipal account / lease agreement - Part T2.1	No contract shall be awarded upon failure to provide the required information	<input type="checkbox"/>

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Reason for non-compliance:

Contact Details :

Office Phone No. _____

Office Fax No. _____

Cell Phone No. _____

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SIGNED ON BEHALF OF TENDERER

DATE:

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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

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT RFP/01/2023-24

VOLUME 1: CONTRACT DOCUMENT

PORTION 1: TENDER

Part T1

Tendering Procedures

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

TENDERING PROCEDURES

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END OF SECTION

Contractor

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Witness 2

Employer

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MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT: RFP/01/2023-24

Section T1.1

Tender Notice and Invitation to Tender

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG

MUNICIPALITY
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MMASEPALA

INVITATION TO BID

BID NO.	DESCRIPTION	EVALUATION CRITERIA	PRICE PER DOCUMENT (Non-refundable)	CIDB GRADING	COMPULSORY BRIEFING SESSION	CONTACT PERSON (TECHNICAL)	CLOSING DATE AND TIME
RFP/01/2023-24	PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM	80/20 or 90/10 80/90 – Price 20/10 – Specific Goals (10 B-BBEE and 10 Locality)	DOWNLOADABLE FOR FREE ON E-TENDER PORTAL OR PRINTED DOCUMENT AVAILABLE AT THE MUNICIPAL MAIN BUILDING AT R600,00 (SEE ADDRESS BELOW)	2EP and Higher	N/A	Mr. M Tshabalala Tel: 082 331 8741 E-mail: mbalekelwat@matjhabeng.co.za	WEDNESDAY 30/08/2023 @ 12:00
Documents are available from:			All bid documents to be submitted at:				
Supply Chain Management Offices Main Building, 1 st floor Room 121 C/O Ryk Street and Stateway Welkom 9460 All bid documents are available from 07 AUGUST 2023			Matjhabeng Local Municipality In the Tender Box placed at the entrance of Municipality offices C/O Ryk Street and Stateway Civic Centre Welkom 9460				
All queries must be directed to:			Mr. Lesibo Sebatane @ 057 391 3911 Email: Lesibo.Sebatane@matjhabeng.co.za and				

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Ms. Sylvia Malgas @ 057 391 3911
E-mail: Sylvia.Malgas@matjhabeng.co.za

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Minimum Requirements:

1. Valid Tax Compliance Status Letter must be attached. 2. In the case of the Joint venture valid tax compliance status letter of all parties must be attached. 3. Copies of Company Registration Certificates reflecting names and identity numbers of active shareholding must be attached (Except for sole traders and partnerships). 4. Copies of JV agreements (in case of JV) must be attached. 5. Municipal Rates & Taxes Account not older than 90 days or a lease agreement must be attached. 6. All supplementary / compulsory forms contained in the bid document must be completed and signed in full. 7. Failure to comply with the above-mentioned conditions may invalidate your bid. 8. A bidder must submit a certificate signed by the bidder certifying that the bidder has no undisputed commitments for Municipal services towards a Municipality or other service provider in respect of which payment is overdue for more than 90 days. 9. Bidders must attach Certified or Original BBBEE Verification Certificate, in case of Joint Venture bidders must submit consolidated BBBEE Score card. 10. Only those tenderers who can demonstrate that they will 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 during the validity of the contract are eligible to submit tenders.

Please Note:

1. Section 217 of the constitution of the Republic of South Africa requires an organ of state to contract for goods and services in accordance with a system which is fair, equitable, transparent, competitive and cost effective. 2. **No bid(s) will be accepted from a person in the service of the state.** 3. No telegraphic, telefax and late bids will be accepted. 4. The lowest bid / proposal will not necessarily be accepted and the Municipality reserves the right to accept where applicable a part or portion of any bid or where possible accepts bids or proposals from multiple bidders. 5. Municipal Supply Chain Management policy and Preferential Procurement policy Framework Act No 5 of 2000 and its regulations will be applied.

APPROVED BY:

MUNICIPAL MANAGER
Adv. LONWABO NGOQO

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**PART A
INVITATION TO BID**

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	RFP/01/2022-23	CLOSING DATE:	30/08/2023	CLOSING TIME:	12:00
DESCRIPTION	PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
C/O RYK STREET AND STATEWAY, CIVIC CENTRE, WELKOM, 9460					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	LESIBO SEBATANE		CONTACT PERSON	MBALEKELWA TSHABALALA	
TELEPHONE NUMBER	057 391 3911		TELEPHONE NUMBER	082 331 8741	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER	N/A	
E-MAIL ADDRESS	Lesibo.Sebatane@matjhabeng.co.za		E-MAIL ADDRESS	Mbalekelwat@matjhabeng.co.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]	
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

Contractor

Part T1

Witness 1

Witness 1

Witness 2

Witness 2

Employer

Employer

Witness 1

Witness 1

Witness 2

Witness 2

PART B
TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED – (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE.”

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g. company resolution)

DATE:

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT RFP/01/2023-24

Section T1.2 Tender Data

Contractor
Part T1

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Section T1.2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT RFP/012023-24

TENDER DATA

The Conditions of Tender are the Standard Conditions of Tender as published in Annex F of the CIDB Standard for Uniformity in Construction Procurement in Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015. A copy is attached directly after this section.

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.

Clause		Addition or Variation to Standard Conditions of Tender
1.1	Actions	<p>The Employer is Matjhabeng Local Municipality</p> <p>The term "bid" in the context of this standard is synonymous with the term "tender".</p>
1.2	Tender Documents	<p>The tender documents issued by the employer comprise one volume. The volume consists of the following:</p> <p>VOLUME 1: CONTRACT DOCUMENT</p> <p>PORTION 1: TENDER</p> <p>Part T1 Tendering procedures</p> <p>Section T1.1 Tender notice and invitation to tender</p> <p>Section T1.2 Tender data</p> <p>Section T1.2 Standard Conditions of Tender</p> <p>Part T2 Returnable documents</p> <p>Section T2.1 List of returnable documents</p> <p>Section T2.2 Returnable Schedules</p> <p>PORTION 2: CONTRACT</p> <p>Part C1 Agreements and contract data</p> <p>Section C1.1 Forms of offer and acceptance</p> <p>Section C1.2 Contract Data</p> <p>Section C1.3 Form of Guarantee</p> <p>Section C1.4 Guarantee (cash deposit)</p> <p>Section C1.5 Occupational Health and Safety Agreement</p> <p>Part C2 Pricing Data</p>

Contractor
Part T1

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Section T1.2

Clause		Addition or Variation to Standard Conditions of Tender
		Section C2.1 Pricing Instructions Section C2.2 Bill of Quantities Section C2.3 Calculations of Tender Sum Part C3 Section C3.1 Description of Works Section C3.2 Engineering Section C3.3 Procurement Section C3.4 Construction Section C3.5 Management Section C3.6 Particular Variations, Specifications and Additions to Standard Specifications Section C3.7 Health and Safety: Specification AO Part C4 Section C4.1 Annexure: Site Information APPENDICES: Appendix A Tender Drawings (Issued)
1.3.2	Interpretation	The Standard Conditions of Tender, the Tender Data, List of Returnable Documents and Returnable Schedules which are required for tender evaluation purposes, shall also form part of the Contract arising from the invitation to tender.
Add the following new clause: 1.3.3		The Tender documents have been drafted in English. The Contract arising from the invitation of tender shall be interpreted and construed in English.
1.4		The Employer's agent is (also known as the Engineer): Matjhabeng Local Municipality Corner Stateway and Ryk Street, Welkom 9460 Tel No : 082 331 8741 Fax No : N/A Email : mbalekelwat@matjhabeng.co.za
2.1	Eligibility	Only those tenderers who satisfy the following criteria are eligible to submit tenders: Only those tenders who are registered with the CIDB, in a contractor grading 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 2EP / Higher Class of construction work, are eligible to submit tenders. Joint ventures are eligible to submit tenders provided that: <ol style="list-style-type: none"> 1. Every member of a joint venture is registered with the CIDB within 10 days from the closing date of tenders; 2. The lead partner has a contractor grading designation in the 2EP class of construction work; and

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Clause		Addition or Variation to Standard Conditions of Tender
		<p>3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor designation determined in accordance with the sum tendered for a 2EP class of construction work, is eligible to submit tenders.</p> <p>Only those tenderers who can demonstrate that they will 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 during the validity of the contract are eligible to submit tenders.</p> <p>The tenderer must submit to the Employer, 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. This is also applicable to sub-contractors being used on the project.</p>
2.2	Cost of Tendering	<p>Add the following to the clause:</p> <p>A non-refundable Bid deposit of R 600,00 payable in cash or by bank guaranteed cheque made out in favour of the Matjhabeng Local Municipality, is required on collection of the Bid documents.</p> <p>Accept that the Employer will not compensate the tenderer for any costs incurred in attending interviews in the office of the employer or the employer's agent (if required).</p>
2.5	Reference documents	<p>The document "General Conditions of Contract for Construction Works", Third Edition, 2015, of the South African Institution of Civil Engineers.</p> <p>Tenderers, Contractors and Subcontractors shall obtain their own copies of this document for tendering purposes and for use for the duration of the Contract from the Secretary of the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685 or SAICE House, Block 19 Thornhill Office Park, Becker Street, Midrand, Tel. 011 805 5947 and shall bear all expenses in this regard.</p>

Contractor

Witness 1

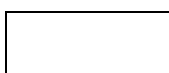
Witness 2

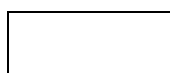
Employer

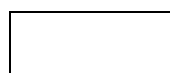
Witness 1

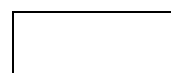
Witness 2

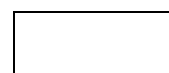
Clause		Addition or Variation to Standard Conditions of Tender
2.7	Site Visit and clarification meeting	<p>A compulsory site visit and clarification meeting will be held as follows:</p> <p>Refer to tender notice and invitation to tender in Part T1.1</p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be received only from those tendering entities appearing on the attendance list.</p> <p>Detail relating to the collection of tender documents is indicated in the Tender Notice and Invitation to Tender (Section T1.1 of the document)</p>
2.8	Seek clarification	<p>Replace the contents of the clause with the following:</p> <p>Request clarification of the tender documents, if necessary, by notifying the Employer's official or the Employer's agent indicated in the tender notice and invitation to tender (Section T1.1) in writing at least ten working days before the closing time stated in clause 2.15.</p>
2.11	Alterations to document	<p>Add the following to the clause:</p> <p>To correct errors made, draw a line through the incorrect entry and write the correct entry above in black ink and place the full signatures of the authorised signatories next to the correct entry.</p>
2.12.1		<p>Add the following to the clause:</p> <p>All alternative tender offers shall be referred to in Section T2.2.2 – Alterations to Tender.</p>
2.12.2		<p>Should the Tenderer wish to offer alternative designs and/or construction materials, he shall include with this Tender, full details thereof including a complete bill of quantities, formal design calculations, and full details of all alternative components proposed to be included in the Works. This should be submitted to the Employer.</p> <p>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.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.</p> <p>No fixed price Tenders will be accepted.</p>

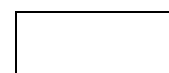

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

Clause		Addition or Variation to Standard Conditions of Tender
2.13	Submitting of a Tender Offer	<p>Add the following to the clause:</p> <p>No claim will be entertained for faults in the tender price resulting from any discrepancies, omissions or indistinct figures.</p>
2.13.2		<p>Each Tenderer is required to return the complete set of documents as listed in the Tender Data with all the required information supplied and completed in all respects.</p>
2.13.3		<p>Parts of each Tender Offer communicated on paper shall be submitted as an original plus zero copies.</p>
2.13.4		<p>Add the following to the clause:</p> <p>“Only authorised signatories may sign the original and all copies of the tender offer where required in terms of 2.13.3.</p> <p>In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated.</p> <p>In case of a COMPANY submitting a tender, include a copy of a resolution by its board of directors authorising a director or other official of the company to sign the documents on behalf of the company.</p> <p>In the case of a CLOSED CORPORATION submitting a tender, include a copy of a resolution by its members authorising a member or other official of the corporation to sign the documents on each member’s behalf.</p> <p>In the case of a PARTNERSHIP submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such authorisation shall be included in the Tender.</p> <p>In the case of a JOINT VENTURE submitting a tender, include a resolution of each company of the Joint Venture together with a resolution by its members authorising a member of the Joint Venture to sign the documents on behalf of the Joint Venture.”</p> <p>Accept that failure to submit proof of authorisation to sign the tender shall result in a Tender Offer being regarded as non-responsive.</p>
2.13.5		<p>The Employer’s address for delivery of tender offers and identification details to be shown on each tender offer package are:</p> <p>Tender box location : Matjhabeng Local Municipality,</p> <p>Physical address : Civic Centre, Corner Ryk and Stateway WELKOM 9460</p>


Contractor


Witness 1

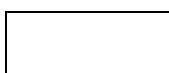

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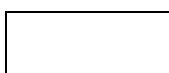

Employer

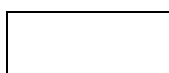

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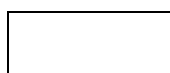

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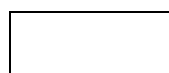
Clause		Addition or Variation to Standard Conditions of Tender
		<p>Identification details : Contract No. RFP/01/2023-24</p> <p>PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM</p>
2.13.6		A two-envelope procedure will not be followed.
2.14	Information and Data to be completed in all respects	<p>Add the following to the clause:</p> <p>“Accept that the Employer shall in the evaluation of tender offers take due account of the Tenderer’s past performance in the execution of similar engineering works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and the Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, and furnish details in section T2.2 of contracts of a similar nature and magnitude which they have successfully executed in the past.”</p>
		<p>Accept that the Employer is restricted in accordance with clause 4.(4) of the Construction Regulations, 2014, to only appoint a contractor whom he is satisfied has the necessary competencies and resources to carry out the work safely. Accept that submitting inferior and inadequate information relating to health and safety (as required in clause 2.23) shall be regarded as justifiable and compelling reasons not to award a contract to a Tenderer.”</p>
2.15.1	Closing time	<p>The closing time and location for the submission of tender offers are:</p> <p>Time : 12:00 on WEDNESDAY, 30/08/ 2023</p> <p>Location : Tender box at Matjhabeng Local Municipality, Welkom</p>
2.16.1	Tender Offer validity	The tender offer validity period is 90 days.
2.16.1		<p>Add the following to the clause:</p> <p>If the tender validity expires on a Saturday, Sunday or public holiday, the tender shall remain valid and open for acceptance until the closure of business on the following working day.</p>
2.17	Clarification of Tender Offer after Submission	<p>Replace the contents of the clause with the following clause:</p> <p>“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 resulting from the product of the unit rate and the quantity by the adjustment of certain line-item totals. No change in the unit rate or prices or substance of the Tender Offer is</p>

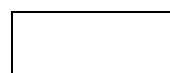

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Witness 2


Employer


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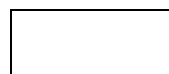
Clause		Addition or Variation to Standard Conditions of Tender
		sought, offered, or permitted. The total of the prices shall be adjusted to reflect the arithmetically correct summation of corrected line-item totals and shall be binding upon the Tenderer.”
2.18		The tenderer shall, when requested by 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.
2.19	Inspections, tests and analysis	The Tenderer must provide access during working hours to his premises for inspections on request.
2.22		Return all retained tender documents prior to the closing time for the submission of Tender Offers.
2.23	Certificates	<p>The following certified certificates / information must be provided with the tender offer: Any tender not complying with the below stipulations, listed a. to h. will be regarded as non-responsive and will therefore not be considered for further evaluation</p> <ul style="list-style-type: none"> a. Bidders must submit a tax compliance verification pin on a SARS letterhead; b. Certificate of Contractor Registration issued by the Construction Industry Development Board. Certificates of Registration in respect of each partner, where a tenderer satisfied the CIDB contractor grading designation requirements through the formation of a joint venture; c. Evidence of registration and proof of good standing with a compensation insurer who is approved by the Department of Labour in terms of section 80 of the compensation for injury and Disease Act (COID) (Act No 130 of 1993); d. Authority for signature on an original company letterhead as requested by T2.2.5 – Form E. e. Copy of Identity Document (if member is a one-man concern) f. Copy of Deed of Trust (if a trust is involved) g. Copy of the curriculum vitae of the person who prepares the Contractor’s Health and Safety Plan, and h. Copy of curriculum vitae of the Health and Safety officer the successful tender intends appointing in accordance with the Occupational and Safety Act. <p>Note: Any tender not complying with above stipulations, listed will be regarded as non-responsive and will therefore not be considered for further evaluation.</p>


Contractor


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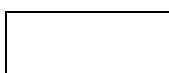

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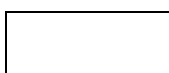

Witness 1


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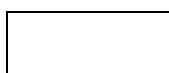
Clause		Addition or Variation to Standard Conditions of Tender
Add the following new clause: 2.24	Canvassing and obtaining of additional information by tenderers	Accept that no Tenderer shall make any attempt either directly or indirectly to canvass any of the Employers officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon. No Tenderer shall make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders."
Add the following new clause: 2.26	Awards to close family members of persons in the service of the state	Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R 2 000.00 to a person who is a spouse, child or parent of a person in the service of the state (defined in clause 2.25), or has been in the service of the state in the previous twelve months, including – a) the name of that person; b) the capacity in which that person is in the service of the state; and c) the amount of the award. In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in Section T2.2.4 must be completed."
Add the following new clause: 2.28	Tax compliance pin	"Submission of a tax compliance verification pin on a SARS letterhead is compulsory." "Bidders should note, that in accordance with legislation, no contract may be awarded to a/an person/entity who has failed to submit a Tax Compliance Verification Pin on a SARS letterhead from the South African revenue Service (SARS)
3.1	Respond to clarification	Replace the contents of the clause with the following: Respond to a request for clarification received up to ten working days before the Tender closing time stated in the Tender Data and notify all Tenderers who drew procurement documents within seven working days of the same date.
3.4	Opening of Tender submissions	The time and location for opening of the tender offers are: Time: 12:00 on Wednesday 30/08/2023 Location : Matjhabeng Local Municipality, Welkom
3.9	Arithmetical Errors	Replace the contents of the clause with the following: Check responsive tender offers for arithmetical errors, correcting them in the following manner:



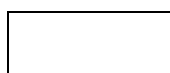
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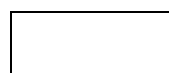
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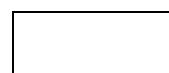
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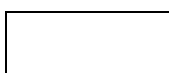


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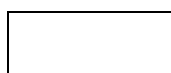


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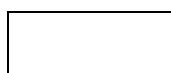
Clause		Addition or Variation to Standard Conditions of Tender
		<p>a) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and the line-item total shall be corrected.</p> <p>b) Where there is an error in the total of the prices, either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the corrected total of the prices shall govern.</p> <p>c) Where there is a discrepancy between the amount indicated in the Tenderer's tender offer and the corrected amount obtained after completing the above steps, the corrected amount shall govern.</p>
<p>3.11</p> <p>3.11.1</p>	<p>Evaluation of Tenders</p> <p>General</p>	<p>Evaluation of Bid Offers</p> <p>The bids will be evaluated in two (2) stages, namely :</p> <ul style="list-style-type: none"> • Stage 1 : Administrative Compliance • Stage 2 : Functionality • Stage 3 : Financial Offer and Specific Goals (80/20) or (90/10). This stage will be limited to successful • proposal(s) accepted by the municipality based on the • outcome of stage 1 and 2 above. The municipality may • choose to request quotes from all successful proposal(s) • as and when the goods/services are required. <p>Stage 1 : Administrative Compliance</p> <p>Over and above the test for responsiveness as described under 3.8 of the Standard Conditions of Tender, failure of the Bidder to submit the following will result in immediate disqualification:</p> <p>(i) Proof of attendance of Compulsory Briefing Session [IF APPLICABLE].</p> <p>(ii) Certificate of authority for signatory).</p> <p>(iii) Copies of Company / CC / Trust / Partnership registration certificates as well as signed agreements and power of attorney for Joint Venture / Consortium if applicable. Certified copies of Identification Documents of active shareholding must be attached (except for sole traders and partnerships).</p> <p>(iv) Joint Venture Agreement and Power of attorney in case of Joint Ventures</p> <p>(v) Tax Compliance Status (SARS Pin) or Declaration by the South African Revenue Services that tax matters of the Tendering company / association or Joint Venture parties are in order.</p> <p>(vi) Certified copy of valid Workmen's Compensation Certificate issued by Department of Labour. This must be submitted for all members / partners in case of Joint Venture / Partnership.</p> <p>(vii) Certified proof of Central Supplier Database registration. This must be submitted for all members / partners in case of Joint Venture / Partnership.</p>



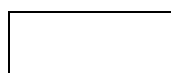
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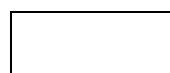
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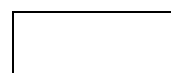
Witness 2



Employer



Witness 1



Witness 2

Clause	Addition or Variation to Standard Conditions of Tender																				
	<p>(viii) Certified proof of payment of Municipal Services, which is not more than three (03) months in arrears. If Municipal Services are paid by the Lessor, in the case where the bid is leasing the premises occupied, a copy of valid Lease Agreement and proof of payment of Municipal Services, which is not more than three (03) months in arrears, must be submitted</p> <p>(ix) Certified proof of Registration with CIDB – Grade 2 EP and / or higher.</p> <p>(X) Form of offer not completed and signed by the authorized signatory.</p> <p>(xi) The bidder must submit a Certified Standard Transfer Specification Certificate (STS) from STS Association.</p> <p>(xii) Proposals must meet the specifications in the tender document (Proposals not meeting the specifications will be disqualified).</p> <p>(xiii) This document must be completed in detailed and each page must be paraphrased.</p> <p>Stage 2 : Functionality</p> <p>Functionality of responsive bids submitted will be evaluated according to the predetermined criteria described below, considering, among other factors, the quality, reliability and the technical capacity and ability of a Bidder.</p> <p>A Bid will not be evaluated further if it fails to meet the minimum threshold of total 70 points out of maximum 100 points for functionality as prescribed in the following tables :</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">CATEGORY</th> <th style="width: 60%;">FUNCTIONAL CRITERIA</th> <th style="width: 20%;">POINTS ALLOCATION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">i</td> <td>Experience of the bidder</td> <td style="text-align: center;">60</td> </tr> <tr> <td style="text-align: center;">ii</td> <td>Key personnel qualifications and experience</td> <td style="text-align: center;">40</td> </tr> <tr> <td colspan="2" style="text-align: right;">TOTAL</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> <p>(i) EXPERIENCE OF THE BIDDER (60 POINTS)</p> <p>The Bidder must submit proof of successfully completed similar projects (Copies of Appointment Letters and/or Orders with Reference Letters and/or Completion Certificate must be attached).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">TARGETED GOALS</th> <th style="width: 20%;">POINTS ALLOCATION</th> </tr> </thead> <tbody> <tr> <td>Bidder has submitted no information or inadequate information to determine scoring levels or bidders submitted appointment letters and/or orders with reference letters and/or completion certificates of combined value of less than R 200 000.</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Bidders submitted appointment letters and/or orders with reference letters and/or completion certificates of combined value of greater than R 200 000.</td> <td style="text-align: center;">20</td> </tr> <tr> <td>Bidders submitted appointment letters and/or orders with reference letters and/or completion certificates of combined value of greater than R 400 000.</td> <td style="text-align: center;">30</td> </tr> </tbody> </table>	CATEGORY	FUNCTIONAL CRITERIA	POINTS ALLOCATION	i	Experience of the bidder	60	ii	Key personnel qualifications and experience	40	TOTAL		100	TARGETED GOALS	POINTS ALLOCATION	Bidder has submitted no information or inadequate information to determine scoring levels or bidders submitted appointment letters and/or orders with reference letters and/or completion certificates of combined value of less than R 200 000.	0	Bidders submitted appointment letters and/or orders with reference letters and/or completion certificates of combined value of greater than R 200 000.	20	Bidders submitted appointment letters and/or orders with reference letters and/or completion certificates of combined value of greater than R 400 000.	30
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Contractor

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Clause	Addition or Variation to Standard Conditions of Tender																		
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	<p>(ii) KEY PERSONNEL QUALIFICATIONS AND EXPERIENCE (40 POINTS) The Bidder must submit Proposed Team Structure, identifying Site Foreman, Site Agent / Artisan. (Certified copies of CVs and certified copies of certificates must be attached).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">KEY PERSONNEL</th> <th style="text-align: center;">TARGETED GOALS</th> <th style="text-align: center;">POINTS ALLOCATION</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="vertical-align: top;">Project Manager (Diploma in Project Management)</td> <td>No information or inadequate information submitted to determine scoring level or 0-1 Years of Experience.</td> <td style="text-align: center;">0</td> </tr> <tr> <td>2 – 3 years of relevant experience.</td> <td style="text-align: center;">10</td> </tr> <tr> <td>4 or above years of relevant experience.</td> <td style="text-align: center;">20</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td rowspan="3" style="vertical-align: top;">Technical Lead (Degree or B-Tech in OT/Electricity Low Current)</td> <td>No information or inadequate information submitted to determine scoring level or 0-1 Years of Experience.</td> <td style="text-align: center;">0</td> </tr> <tr> <td>2 – 3 years of relevant experience.</td> <td style="text-align: center;">10</td> </tr> <tr> <td>4 or above years of relevant experience.</td> <td style="text-align: center;">20</td> </tr> </tbody> </table>		KEY PERSONNEL	TARGETED GOALS	POINTS ALLOCATION	Project Manager (Diploma in Project Management)	No information or inadequate information submitted to determine scoring level or 0-1 Years of Experience.	0	2 – 3 years of relevant experience.	10	4 or above years of relevant experience.	20	Technical Lead (Degree or B-Tech in OT/Electricity Low Current)	No information or inadequate information submitted to determine scoring level or 0-1 Years of Experience.	0	2 – 3 years of relevant experience.	10	4 or above years of relevant experience.	20
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	<p>Stage 3 : Financial Offer and Specific Goals</p> <p>As stated above This stage will be limited to successful proposal(s) accepted by the municipality based on the outcome of stage 1 and 2 above. The municipality may choose to request quotes from all successful proposal(s) as and when the goods/services are required. The points scored for functionality are not carried over or considered in the calculation of the Financial and Preference evaluation.</p> <p>For bids with a Rand Value above R 2 000.00 and up to a Rand value of R 50 million (80 / 20)</p> <p>(1) The following formula will be used to calculate the points out of 80 for price in respect of a tender with a Rand value equal to or above R2 000.00 and up to a Rand value of R50 million, inclusive of all applicable taxes.</p> $Ps=80(1-(Pt-Pmin)/Pmin)$ <p>Where</p> <p>Ps = Points scored for comparative price of bid or offer under consideration;</p> <p>Pt = Comparative price of bid or offer under consideration, and;</p>																		

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Witness 2

Employer

Witness 1

Witness 2

Clause	Addition or Variation to Standard Conditions of Tender																																								
	<p>(2) Subject to sub-regulation (3) below, points must be awarded to a Bidder for attaining their B-BBEE status level of contributor in accordance with the table below:</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>B-BBEE STATUS LEVEL OF CONTRIBUTOR</th> <th>NUMBER OF POINTS</th> <th>POINT ALLOCATION</th> </tr> </thead> <tbody> <tr><td>1</td><td>20</td><td>10</td></tr> <tr><td>2</td><td>18</td><td>5</td></tr> <tr><td>3</td><td>16</td><td>4</td></tr> <tr><td>4</td><td>12</td><td>3</td></tr> <tr><td>5</td><td>8</td><td>4</td></tr> <tr><td>6</td><td>6</td><td>1</td></tr> <tr><td>7</td><td>4</td><td>0</td></tr> <tr><td>8</td><td>2</td><td>0</td></tr> <tr><td>Non-compliant contributor</td><td>0</td><td></td></tr> </tbody> </table> <p>(3) A Bidder must submit proof of its B-BBEE status level of contributor.</p> <p>(4) A Bidder failing to submit proof of B-BBEE status level of contributor or is a non-compliant contributor to B-BBEE may not be disqualified, but :</p> <p style="margin-left: 40px;">(a) may only score points out of 80 for price and 10 for locality; and (b) scores 0 points out of 10 for B-BBEE.</p> <p>(5) A Bidder may not be awarded points for B-BBEE status level of contributor if the tender documents indicate that the tenderer intends subcontracting more than 30% of the value of the contract to any other person not qualifying for at least the points that the tenderer qualifies for, unless the intended subcontractor is an EME that has the capability to execute the subcontract.</p> <p>(6) 50% of the 20 points will be allocated to promote the goal for local area of the bidder. Company registration document/Municipal Account/Lease Agreement must be attached to claim points for this specific goal.</p> <p>Points will be claimed in accordance with the table below:</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Local area of supplier</th> <th>Number of Points for Preference</th> </tr> </thead> <tbody> <tr> <td>Within the boundaries of the Municipality</td> <td>10</td> </tr> <tr> <td>Outside of the boundaries of the Municipality, but within the Lejweleputswa District Municipality.</td> <td>6</td> </tr> <tr> <td>Within the boundaries of Free State Province</td> <td>4</td> </tr> <tr> <td>Outside of the boundaries of Free State Province</td> <td>0</td> </tr> </tbody> </table>	B-BBEE STATUS LEVEL OF CONTRIBUTOR	NUMBER OF POINTS	POINT ALLOCATION	1	20	10	2	18	5	3	16	4	4	12	3	5	8	4	6	6	1	7	4	0	8	2	0	Non-compliant contributor	0		Local area of supplier	Number of Points for Preference	Within the boundaries of the Municipality	10	Outside of the boundaries of the Municipality, but within the Lejweleputswa District Municipality.	6	Within the boundaries of Free State Province	4	Outside of the boundaries of Free State Province	0
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Contractor

Witness 1

Witness 2

Employer

Witness 1

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Clause		Addition or Variation to Standard Conditions of Tender
		<p>(7) The points scored by a Bidder for B-BBEE and Locality in terms of sub-regulation (2) and sub-regulation (6) must be added to the points scored for price under sub-regulation (1).</p> <p>(8) The points scored must be rounded off to the nearest two decimal places.</p> <p>(9) Subject to sub-regulation (9) and regulation 11, the contract must be awarded to the tenderer scoring the highest points.</p> <p>(10)(a) If the price offered by a Bidder scoring the highest points is not market-related, the organ of state may not award the contract to that Bidder.</p> <p>(b) The organs of state may :</p> <p>(i) negotiate a market-related price with the tenderer scoring the highest points or cancel the Bid;</p> <p>(ii) if the Bidder does not agree to a market-related price, negotiate a market-related price with the Bidder scoring the second highest points or cancel the Bid;</p> <p>(iii) if the Bidder scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the Bidder scoring the third highest points or cancel the Bid.</p> <p>(c) If a market-related price is not agreed as envisaged in paragraph (b)(iii), the organ of state must cancel the Bid.</p>
3.12	Insurance provided by the Employer	<p>Replace the contents of the clause with the following:</p> <p>If requested by any Tenderer, submit for the Tenderers' information the policies or certificates of insurance (or both) which the conditions of contract identified in the Contract Data require the Employer to provide.</p>
3.13.1	Acceptance of Tender Offer	<p>A Tender offer will only be accepted on condition that such acceptance is not prohibited in terms of clause 44 of the Municipal Supply Chain Management Regulations published in terms of the Municipal Finance Management Act, 2003.</p>
3.18	Copies of Contract	<p>The successful tenderer shall receive one copy of the signed contract.</p>
		<p>The additional conditions of Tender are:</p> <ol style="list-style-type: none"> 1 Matjhabeng Local Municipality may also request that the Tenderer provide written evidence that his financial, labour and resources are adequate for carrying out project. 2 The Matjhabeng 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. 3 The Matjhabeng Local Municipality reserves the right to appoint a different Service Provider 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. 4 The bid document shall be submitted as a whole and shall not be taken apart.


Contractor


Witness 1


Witness 2


Employer


Witness 1


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Clause		Addition or Variation to Standard Conditions of Tender
		5 List of returnable documents (PART T2) must be completed in full. (A bidder's company profile will not be used by the Matjhabeng Local Municipality to complete PART T2 on behalf of the bidder) NB: If PART T2 is not completed in full by the bidder, this offer will be rejected

END OF SECTION

Contractor

Part T1

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Section T1.2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT RFP/01/2023-24

Section T1.2 Tender Data

Annexure F: Standard Conditions of Tender

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Employer

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**MATJHABENG LOCAL MUNICIPALITY
PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT RFP/01/2023-24

**Section T1.2
Standard Conditions of Tender**

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Employer

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MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

STANDARD CONDITIONS OF TENDER

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These standard conditions of tender are identical to those published in SANS 294:2004 (Annex F)

END OF SECTION

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MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT RFP/01/2023-24

STANDARD CONDITIONS OF TENDER

GENERAL

1.1 Actions

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

1.2 Tender documents

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

1.3 Interpretation

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 the conditions of tender.

1.3.2 The 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.

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

Contractor

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- 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.

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.

1.5 The Employer’s right to accept or reject any tender offer

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

1.5.2 After the cancellation of a tender process or the rejection of all tender offers the employer may abandon the proposed procurement and re-issue a similar tender notice and invitation to tender not less than six months after the closing date for tender offers or have it performed in another manner at any time.

TENDERER’S OBLIGATIONS

2.1 Eligibility

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

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 comply with requirements.

2.3 Check documents

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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.

2.5 Reference documents

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

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.

2.7 Site visit and clarification meeting

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

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.

2.9 Insurance

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

Contractor

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Witness 2

Employer

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Witness 2

2.10 Pricing the tender offer

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.

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

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.

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.

2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or alterations or additions 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.

2.12 Alternative tender offers

2.12.1 Submit alternative tender offers only if 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.

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.

2.13 Submitting a tender offer

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

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 **BLACK INK**.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

2.14 Information and data to be completed in all respects

Accept that the 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 being non-responsive.

2.15 Closing time

- 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.

Contractor

Witness 1

Witness 2

Employer

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

2.16 Tender offer validity

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.

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

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 total of the prices or substance of the tender offer should be sought, offered, or permitted. The total of the prices stated by the tenderer shall be binding upon the tenderer.

2.18 Provide other material

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), referencing arrangements, or samples of materials, considered necessary by the employer for the purpose of 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 being non-responsive.

2.18.2 Dispose of samples of materials, where required.

2.19 Inspections, test and analysis

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

2.20 Submit securities, bonds, policies, etc.

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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.

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.

2.23 Certificates

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

EMPLOYER'S UNDERTAKINGS

3.1 Respond to clarification

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

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 of the tender notice until 7 days before the tender closing time stated in the tender data. If, as a result of the issuing of addenda, 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.

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.

3.4 Opening of tender submissions

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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.

3.4.2 Announce at the public 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.

3.4.3 Make available the name of each tenderer whose tender offer is opened, the total of his prices, if applicable, preferences claimed and time for completion (if any) for the main tender offer only.

3.5 Two envelope system

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.

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

3.6 Non-disclosure

Do 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 event of a contract, until after the award of the contract to the successful tenderer.

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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3.8 Test for responsiveness

3.8.1 Determine, on opening and before detailed evaluation, whether each tender offer properly received:

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

3.8.2 A responsive tender is one that conforms to all the items, 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.

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

3.9 Arithmetical errors

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 words shall govern.
- b) If a bill of quantities (or schedule of quantities or schedule of rates) applies 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 obvious 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 items prices (and their rates if a bill of quantities applies) to achieve the tendered total of the prices.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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.

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.

3.11 Evaluation of tender offers

3.11.1 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 methods that are indicated in the tender data and described as methods 1, 2, 3 and 4.

3.11.2 Method 1: In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer.
- b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.

3.11.3 Method 2: In the case of a financial offer and preferences:

- a) Score tender evaluation points for each financial offer.
- b) Confirm that tenderers are eligible for the preferences claimed and, if so, score tender evaluation points for preferencing.
- c) Calculate total tender evaluation points.
- d) Rank tender offers from the highest number of tender evaluation points to the lowest.
- e) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

3.11.4 Method 3: In case of a financial offer and quality:

- a) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Score tender evaluation points for each financial offer.
- c) Calculate the total tender evaluation points.
- d) Rank tender offers from the highest number of tender evaluation points to the lowest.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- e) 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.

3.11.5 Method 4: In the case of a financial offer, quality and preferences:

- a) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Score tender evaluation points for each financial offer.
- c) Confirm that tenderers are eligible for the preferences claimed and, if so, score tender evaluation points for preferencing.
- d) Calculate total tender evaluation points.
- e) Rank tender offers from the highest number of tender evaluation points to the lowest.
- f) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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

3.11.6.1 Scoring financial offers

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

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

Where

N_{FO} is the number of tender evaluation points awarded for the financial offer;

W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the tender data;

A is the number calculated using the formula and option described in table F.1 as stated in the tender data.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Table F.1 – Formula for calculating the value of A^a

1	2	3	4
Formula	Basis for comparison	Option 1	Option 2
1	Highest price or discount	$\left(1 + \frac{(P - P_m)}{P_m}\right)$	P/P_m
2	Lowest price or percentage commission/fee	$\left(1 - \frac{(P - P_m)}{P_m}\right)$	P_m/P
^a P_m is the comparative offer of the most favourable comparative offer. P is the comparative offer of the tender offer under consideration.			

3.11.6.2 Scoring quality

Score quality in each of the categories in accordance with the tender data and calculate the total score for quality.

3.12 Insurance provided by the employer

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

3.13 Acceptance of tender offer

3.13.1 Accept the tender offer only if the tenderer complies with the legal requirements, if any, stated in the tender data.

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. Provided that 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3.14 Notice to unsuccessful tenderers

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

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.

3.16 Issue final contract

Prepare and issue the final draft of the 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.

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.

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.

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Part T2 Returnable Documents

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT: RFP/01/2023-24

RETURNABLE DOCUMENTS

INDEX

Section	Description	Page
T2.1	LIST OF RETURNABLE DOCUMENTS.....	36
T2.2	RETURNABLE DOCUMENTS	40

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1


Witness 2

MATJHABENG LOCAL MUNICIPALITY


**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT: RFP/01/2023-24


Section T2.1
List of Returnable Documents




Contractor




Witness 1




Witness 2



Employer



Witness 1



Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

LIST OF RETURNABLE DOCUMENTS

OVER AND ABOVE THE DOCUMENTS AND ADHERENCE TO THE REQUIREMENTS MENTIONED ABOVE THE TENDERER MUST SUBMIT THE FOLLOWING DOCUMENTS WITH THIS TENDER. IF THE DOCUMENTS ARE NOT INCLUDED IN THE DOCUMENT, THE MUNICIPALITY WILL NOT CONSIDER THIS TENDER.

Clause referred to in Standard Conditions of Tender	Document
2.1	Copy of Certificate of Contractor Registration or proof of registration with the CIDB as a Category 2EP or higher Contractor.
2.13.4	Letter of authorization to sign the Form of Offer and where required in tender document.
2.28	Tax Compliance Verification pin on SARS letterhead

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

INDEX

THE RETURNABLE SCHEDULES LISTED BELOW MUST BE COMPLETED AND SUBMITTED WITH THE TENDER OFFER. IF THE DOCUMENTS ARE NOT INCLUDED IN THE DOCUMENT, THE MUNICIPALITY WILL NOT CONSIDER THIS TENDER.

ITEM	DESCRIPTION	PAGE NO
T2.2.1	FORM A: COMPULSORY ENTERPRISE QUESTIONNAIRE	41
T2.2.2	FORM B: ALTERATIONS BY TENDERER	43
T2.2.3	FORM C: RECORD OF ADDENDA TO TENDER DOCUMENT	44
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T2.2.19	FORM S: SITE INSPECTION CERTIFICATE	84
T2.2.20	QUALITY CRITERIA AND POINTS CLAIMED	85
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Contractor

Witness 1

Witness 2


Employer

Witness 1

Witness 2

Note: The Bidder is required to complete each and every schedule and form listed above to the best of his ability, as the evaluation of tenders and eventual contract will be based on the information provided by the Bidder. Failure of a Bidder to complete the schedules and forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection on the basis that the tender is non-responsive.


END OF SECTION




Contractor




Witness 1




Witness 2



Employer



Witness 1



Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Section T2.2 Returnable Documents

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.1

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 :

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 or director, manager, principal stakeholder or stakeholder in a company or close corporation is currently or 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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 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 ON BEHALF OF TENDERER

DATE:

--	--

POSITION

NAME OF BIDDER

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.3

FORM C: RECORD OF ADDENDA TO TENDER DOCUMENT

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

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

--	--

SIGNED ON BEHALF OF TENDERER

DATE:

--	--

POSITION

NAME OF BIDDER

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.4
FORM D: DECLARATION OF INTEREST

MBD 4

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

3.1 Full Name:

3.2 Identity Number:

3.3 Company Registration Number:

3.4 Tax Reference Number:

3.5 VAT Registration Number:

3.6 Are you presently in the service of the state? ¹ **YES / NO**

3.6.1 If so, furnish particulars.

.....
.....

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

3.7.1 If so, furnish particulars.

.....
.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3.8 Do you, have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?

YES / NO

3.8.1 If so, furnish particulars.

.....
.....

3.9 Are you, aware of any relationship (family, friend, other) between a bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?

YES / NO

3.9.1 If so, furnish particulars.

.....
.....

3.10 Are any of the company's directors, managers, principle shareholders or stakeholders in service of the state?

YES / NO

3.10.1 If so, furnish particulars.

.....
.....

3.11 Are any spouse, child or parent of the company's directors, managers, principle shareholders or stakeholders in service of the state?

YES / NO

3.11.1 If so, furnish particulars.

.....
.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4. Full details of directors / trustees / members / shareholders.

Full Name	Identity Number	State Employee Number

CERTIFICATION

I, THE UNDERSIGNEDCERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT. I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

--	--

SIGNED ON BEHALF OF TENDERER

DATE:

--	--

POSITION

NAME OF BIDDER

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

--

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

T2.2.5
FORM E: CERTIFICATE OF AUTHORITY

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.

PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:

Certificate of Authority

"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 :

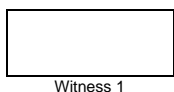
FULL NAMES OF SIGNATORY :

AS WITNESSES : 1.

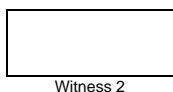
2.



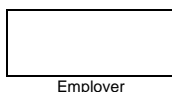
Contractor



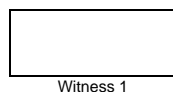
Witness 1



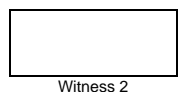
Witness 2



Employer



Witness 1



Witness 2

PRO-FORMA 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:

Contractor

Witness 1


Witness 2

Employer

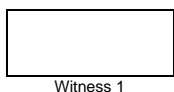
Witness 1

Witness 2

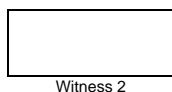
**ATTACH HERETO THE DULY SIGNED AND DATED
ORIGINAL OR CERTIFIED COPY OF AUTHORITY OF
SIGNATORY ON COMPANY LETTERHEAD**



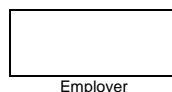
Contractor



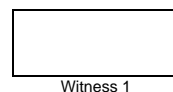
Witness 1



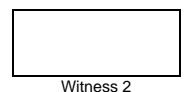
Witness 2



Employer



Witness 1



Witness 2

T2.2.6
FORM F: SCHEDULE OF WORKS PREVIOUSLY EXECUTED

The following is a statement of major works successfully executed by myself/ourselves in recent years.

Failure to detail the required information shall signify that the tender is submitted by an inexperienced tenderer.

Employer	Engineer / Consultant Firm	Nature of Works / Description of Work	Value of Construction Works	Duration and Completion Date
	Firm Contact Name Telephone No.			
	Firm Contact Name Telephone No.			
	Firm Contact Name Telephone No.			
	Firm Contact Name Telephone No.			
	Firm Contact Name Telephone No.			

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Employer	Engineer / Consultant Firm	Nature of Works / Description of Work	Value of Construction Works	Duration and Completion Date
	Firm Contact Name Telephone No			
	Firm Contact Name Telephone No			
	Firm Contact Name Telephone No			
	Firm Contact Name Telephone No			
	Firm Contact Name Telephone No			
	Firm Contact Name Telephone No			

[Signature Box]

Contractor

[Signature Box]

Witness 1

[Signature Box]

Witness 2

[Signature Box]

Employer

[Signature Box]

Witness 1

[Signature Box]

Witness 2

NB.

- 0 – 1** Completion Certificates must be attached in order to qualify for five (5) points.

- 2 – 6** Completion Certificates must be attached in order to qualify for fifteen (15) points.

- 7 and above** Completion Certificates must be attached in order to qualify for thirty-five (35) points.

The following information must be contained in each Completion Certificate for it to qualify for points as prescribed above:

- I. Description of work
- II. Value
- III. Contract Construction Period
- IV. Actual Construction Period
- V. Date Completed

--	--

SIGNED ON BEHALF OF TENDERER

DATE:

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ATTACH HERETO THE COMPLETION
CERTIFICATES

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.7

FORM G: PRESENT COMMITMENTS

Employer	Engineer	Nature of Works	Value of Works (R)	Duration and Completion Date
	Firm Contact Name Telephone No.			
	Firm Contact Name Telephone No.			
	Firm Contact Name Telephone No.			
	Firm Contact Name Telephone No			

--	--

SIGNED ON BEHALF OF TENDERER

DATE:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.8

FORM H: DECLARATION OF GOODSTANDING REGARDING TAX

SOUTH AFRICAN REVENUE SERVICES	Tender No:
	Closing Date:

DECLARATION OF GOOD STANDING REGARDING TAX

PARTICULARS

1. Name of Taxpayer/Tenderer:

2. Trade Name:

3. Identification Number: (If applicable)

4. Company / Close Corporation registration number:

5. Income Tax reference number:

6. VAT registration number: (If applicable)

7. PAYE employer’s registration number: (If applicable)

8. Monetary value of Bid:

DECLARATION

I, the undersigned, the above taxpayer/bidder, hereby declare that my Income Tax, Pay-As-You-Earn (PAYE) and Value-Added-Tax (VAT) obligations of the above-mentioned taxpayer, which include the rendition of returns and payment of the relevant taxes:

- (i) Have been satisfied in terms of the relevant Acts; or
- (ii) That suitable arrangements have been made with the Receiver of Revenue,..... to satisfy them.*

.....

SIGNATURE	CAPACITY	DATE
------------------	-----------------	-------------

PLEASE NOTE:* The declaration (ii) cannot be made unless formal arrangements have been made with the Receiver of Revenue with regard to any outstanding revenue/outstanding tax returns.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

**ATTACH HERETO TAX COMPLIANCE VERIFICATION
PIN ON SARS LETTERHEAD**

FOR COMPANIES AND CLOSE CORPORATIONS:

Tax Compliance Letter with a unique PIN in terms of Electronic Tax Compliance Status (TCS) system from SARS.

FOR JOINT VENTURES:

Each party to a Joint Venture shall submit separate Tax Compliance Letter with a unique PIN in terms of Electronic Tax Compliance Status (TCS) system from SARS.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.9

**FORM I: CERTIFICATE OF GOODSTANDING WITH COMPENSATION
COMMISSIONER**

The Bidder is to attach to this page a valid Certificate of good standing with the Compensation Commissioner or with the Federated Employers' Mutual Assurance (FEM). Failure to attach this certificate will render the Tender non-responsive.

--	--

SIGNED ON BEHALF OF TENDERER

DATE:

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Contractor

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Witness 1

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Witness 2

--

Employer

--

Witness 1

--

Witness 2

ATTACH HERETO LATEST LETTER OF
GOODSTANDING

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.10
FORM J: PROPERTY RATES CLEARANCE

Proof of payment of Municipal rates and taxes and/or lease agreement shall be attached to this Schedule.

- where the tenderer is the owner of the property / business:
 - municipal account registered in the name of the tenderer not older than three (3) months;

- where the tenderer is not the owner of the property / business:
 - a valid lease agreement; or
 - affidavit from the property owner that the address used to claim points in the MBD 6.1 is being rented out to the tenderer at no cost not older than three (3) months.

The documentation provided herein shall not be older than three (3) months from the date of issue of this tender.

Each party to a joint venture shall submit separate proof of payment of Municipal rates and taxes and/or lease agreement.

SIGNED ON BEHALF OF TENDERER	DATE:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

**ATTACH HERETO PROOF OF PAYMENT OF
MUNICIPAL RATES AND TAXES AND/OR LEASE
AGREEMENT**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.11
FORM K: FINANCIAL REFERENCES

FINANCIAL STATEMENTS

I/We agree, if required, to furnish an audited copy of the latest set of financial statements together with my/our Directors' and Auditors' report for consideration by the Client.

DETAILS OF TENDERER'S 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: you are also required to attach a financial reference letter stating bank rating from your financial institution.

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										
How long has this account been in existence:	<table border="1"> <tr> <td>0-6 months</td> <td><input type="checkbox"/></td> <td rowspan="4">(Tick which is appropriate)</td> </tr> <tr> <td>7-12 months</td> <td><input type="checkbox"/></td> </tr> <tr> <td>13-24 months</td> <td><input type="checkbox"/></td> </tr> <tr> <td>More than 24 months</td> <td><input type="checkbox"/></td> </tr> </table>	0-6 months	<input type="checkbox"/>	(Tick which is appropriate)	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"/>	(Tick which is appropriate)								
7-12 months	<input type="checkbox"/>									
13-24 months	<input type="checkbox"/>									
More than 24 months	<input type="checkbox"/>									

--	--

SIGNED ON BEHALF OF TENDERER

DATE:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

ATTACH HERETO FINACIAL REFERENCE LETTER
STATING BANK RATING FROM FINANCIAL
INSTITUTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.12

FORM L: SUPERVISORY AND SAFETY PERSONNEL

PREVIOUS EXPERIENCE ON WORKS OF A SIMILAR NATURE DURING THE LAST FIVE YEARS

Name	% Time on Site	Position (Current)	Accredited Qualifications	Service (Years)	Name of Project And year executed	Value of Works (R)	Position Occupied

--	--

SIGNED ON BEHALF OF TENDERER

DATE:

--

Contractor

--

Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

**ATTACH HERETO CURRICULUM VITAE AND
CERTIFIED COPIES OF QUALIFICATIONS**



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

T2.2.13 LABOUR UTILISATION

LABOUR CATEGORIES - Definitions

NOTE: These definitions serve as a guideline to complete the following table and will in no respect alter the Project Specifications or Standardised Specifications.

1. General Foreman / Foreman

An employee who gives out work, directly co-ordinates and supervises employees. His duties encompass any one or more of the following activities:

- a) Supervision;
- b) maintaining discipline;
- c) ensuring safety on the workplace;
- d) being responsible to the Contractor for efficiency and production for his portion of the works; and
- e) performing skilled work, whether in an instructional capacity or otherwise.

2. Charge hand

An employee engaged in any one or more of the following activities:

- a) Being primarily employed in a supervisory capacity, but who may also be doing the work of an artisan;
- b) giving out work to other employees under his control and supervision;
- c) ensuring safety on the workplace;
- d) maintaining discipline; and
- e) being directly responsible to a general foreman or foreman or the Contractor or the Contractor's representative for efficiency and production for his portion of the works.

3. Artisan

An employee who has successfully completed all prescribed courses at a practical institutional training centre for a particular trade and who has successfully completed

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

the on-site period of training as prescribed and who has successfully passed the prescribed trade tests.

4. Team Leader

An employee engaged in any one or more of the following activities:

- a) Being employed in a supervisory capacity, but who may also be doing the work of a skilled person;
- b) giving out work to other employees under his control and supervision;
- c) maintaining discipline;
- d) being directly responsible to a Charge hand or a foreman or a general foreman or the employer's authorised representative for efficiency and production for his portion of the works.

5. Skilled Employee

An employee engaged in an ancillary trade or an assistant artisan.

6. Semi-Skilled Employee

An employee with any specified skills, an apprentice or a trainee-artisan.

7. Unskilled Employee

An employee engaged on any task or operation not specified above.

8. Imported Employee

Personnel permanently employed by Contractor.

9. Local Employee

Temporary workforce employed through Labour Desk

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM M: LABOUR UTILISATION - MAN DAYS

Schedule of Labour Content

The tenderer must complete a standard table reflecting the labour force anticipated to be employed on this contract, including labour employed by sub-contractors.

Type of Labour	Man-Days	Work Opportunities	Minimum Wage Rate per unit	Total Wage Cost (Exclusive. VAT)
A. Local Labour employed through main contractor				
B. Local Labour employed through sub-contractors				
Total				
(B + C)/Tendered Sum (%)				
Estimated Work Opportunities (B & C)				

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SIGNED ON BEHALF OF TENDERER

DATE:

T2.2.14

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

FORM N: COMPLIANCE WITH OHSA (ACT 85 OF 1993)

Tenderers are required to satisfy the Employer and the Engineer as to their ability and available resources to comply with the above by answering the following questions and providing the relevant information required below.

1. Is the Contractor familiar with the OHSA (ACT 85 OF 1993) and its Regulations? **YES / NO**

2. Who will prepare the Contractor's Health and Safety Plan? (Provide a copy of the person/s curriculum vitae/s or company profile).

3. Does the Contractor have a health and safety policy? If yes, provide a copy. How is this policy communicated to all employees? **YES / NO**

4. Does the Contractor keep records of safety aspects of each construction site? If yes, what records are kept? **YES / NO**

5. Does the Contractor conduct monthly safety meetings? If yes, who is the chairperson of the meeting, and who attends these meetings? **YES / NO**

6. Does the Contractor have a safety officer in his employment, responsible for the overall safety of his company? If yes, please explain his duties and provide a copy of his CV - (Attach) **YES / NO**

7. Does the Contractor have trained first aid employees? If yes, indicate who. **YES / NO**

8. Does the Contractor have a safety induction training programme in place? If yes, provide a copy. **YES / NO**

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SIGNED ON BEHALF OF TENDERER

DATE:

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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

ATTACH HERETO CURRICULUM VITAE AND SAFETY INDUCTION TRAINING PROGRAMME

T2.2.15

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM O: SCHEDULE OF PLANT AND EQUIPMENT

1. Major Plant and Equipment available for this Contract:

Quantity	Size, Description, Capacity, etc.

2. Major Plant and Equipment that will be hired for this contract if my/our tender is accepted:

Quantity	Size, Description, Capacity, etc.

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SIGNED ON BEHALF OF TENDERER

DATE:

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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

**ATTACH HERETO PROOF OF EQUIPMENT OWNED
AND/OR EQUIPMENT TO BE HIRED**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

T2.2.16
FORM P: SCHEDULE OF PROPOSED SUBCONTRACTORS

The Bidder shall list below any subcontractors he intends to employ to carry out part(s) of the Works.

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

Subsequent to the acceptance of this tender the contractor shall subcontract targeted enterprises directly in the performance of the contract to the extent that the total financial value of such subcontracts, in accordance with all the requirements of this document, is sufficient to achieve the contract participation goal provided for in the contract (ref. **Part C3: Scope of Work**; Section C3.3: Procurement; C3.3.3: Participation of Targeted Enterprises).

The Matjhabeng Local Municipality has determined the minimum Contact Participation Goal (CPG) for this contract to be **30%** towards the enhancement of the Contractor Development Programme for local enterprises.

Company	Portion of Contract	Approx. Value

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SIGNED ON BEHALF OF TENDERER

DATE:

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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

T2.2.17

MBD 6.1

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

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







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

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
- 1.2 The **80/20 or 90/10 preference point system** will be applicable in this tender. The lowest/highest acceptable tender will be used to determine the accurate system once tenders are received.
- 1.3 **Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:**
 - 1.3.1 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 of above R 50 000 000 (all applicable taxes included).
 - a) Price; and
 - b) Specific Goals (B-BBEE status level contribution and Locality).
- 1.4 The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80/90
SPECIFIC GOALS (10 B-BBEE and 10 Locality)	20/10
Total points for Price and Specific Goals	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

					
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

1.5.1 **B-BBEE**

Failure on the part of a tenderer to submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African National Accreditation System (SANAS), or a sworn affidavit confirming annual turnover and level of black ownership in case of an EME and QSE together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5.2 **LOCALITY**

Failure on the part of tenderer to submit the following:

- where the tenderer is the owner of the property / business:
 - municipal account registered in the name of the tenderer not older than 3 months;
- where the tenderer is not the owner of the property / business:
 - valid lease agreement; or
 - affidavit from the property owner that the address used to claim points in the MBD 6.1 is being rented out to the tenderer at no cost not older than 3 months.
- where the tenderer submitted incorrect or outdated information (account, lease agreement or affidavit) or none of the above, it will be interpreted to mean that preference points for Locality are not claimed.

1.5.3 The municipality reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the municipality.

2. **DEFINITIONS**

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

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

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

2.4 “**comparative price**” means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;

2.5 “**consortium or joint venture**” means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 2.6 “**contract**” means the agreement that results from the acceptance of a bid by an organ of state;
- 2.7 “**EME**” means any enterprise with an annual total revenue of R10 million or less .
- 2.8 “**firm price**” means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.9 “**functionality**” means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.10 “**non-firm prices**” means all prices other than “firm” prices;
- 2.11 “**person**” includes a juristic person;
- 2.12 “**sub-contract**” means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.13 “**tender**” means a written offer in the form determined by the municipality in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- 2.14 “**price**” means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- 2.15 “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- 2.16 “**tender for income-generating contracts**” means a written offer in the form determined by an municipality in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the municipality and a third party that produces revenue for the municipality, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions;
- 2.17 “**the Act**” means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000);
- 2.18 “**total revenue**” bears the same meaning assigned to this expression in the Codes of Good; Practice on Black Economic Empowerment, issued in terms of section 9(1) of the

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Broad-Based Black Economic Empowerment Act and promulgated in the Government Gazette on 9 February 2007;

- 2.19 “**trust**” means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.20 “**trustee**” means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

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

3.1 POINTS AWARDED FOR PRICE

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

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

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

Where,

- Ps = Points scored for comparative price of bid under consideration;
- Pt = Comparative price of bid under consideration; and
- Pmin = Comparative price of lowest acceptable bid.

4. POINTS AWARDED FOR SPECIFIC GOALS

In terms of the Preferential Procurement policy of Council section 4(2); 5(2); 6(2); 7(2) and 8(2), preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 4.1 and 4.2 below as may be supported by proof/ documentation stated in the conditions of this tender:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

4.1 **B-BBEE**

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

4.2 **LOCALITY**

Locality of supplier	Number of points for Preference (90/10)	Number of points for Preference (80/20)
Within the boundaries of Matjhabeng Local Municipality	5	10
Within the boundaries of Lejweleputswa District	3	6
Within the boundaries of the Free State Province	2	4
Outside the boundaries of the Free State Province or failure to provide proof	0	0

5. **BID DECLARATION**

Bidders who claim points in respect of B-BBEE and Locality must complete the following:

5.1 **B-BEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 5.1**

5.1.1 B-BBEE Status Level of Contribution: = (maximum of 5 or 10 points)

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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

5.2 LOCALITY CLAIMED IN TERMS OF PARAGRAPH 1.4 AND 5.2

5.2.1 LOCALITY: (maximum of 5 or 10 points)

5.3 SUB-CONTRACTING

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

5.3.2 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? **YES / NO**
(delete which is not applicable)

6. DECLARATION WITH REGARD TO COMPANY/FIRM

6.1 Name of firm :

6.2 VAT registration number :

6.3 Company registration number :

6.4 TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

6.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

6.6 COMPANY CLASSIFICATION

- Manufacturer
 - Supplier
 - Professional service provider
 - Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

6.7 MUNICIPAL INFORMATION

- 6.7.1 Municipality where business is situated
- 6.7.2 Registered Account Number
- 6.7.3 Stand Number

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

6.9 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 contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have:
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

a result of having to make less favourable arrangements due to such cancellation;

(d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution.

WITNESSES:

- 1.
- 2.

.....
SIGNATURE(S) OF BIDDER(S)

DATE :

ADDRESS:

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**ATTACH HERETO B-BBEEVERIFICATION
CERTIFICATE**



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

T2.2.18

MBD 8

FORM R: 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
	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?</p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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:		
Item	Question	Yes	No
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.

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SIGNED ON BEHALF OF TENDERER

DATE:

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POSITION

NAME OF BIDDER

<input style="width: 100%; height: 30px;" type="text"/>	<input style="width: 100%; height: 30px;" type="text"/>	<input style="width: 100%; height: 30px;" type="text"/>	<input style="width: 100%; height: 30px;" type="text"/>	<input style="width: 100%; height: 30px;" type="text"/>	<input style="width: 100%; height: 30px;" type="text"/>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.19
FORM S: SITE INSPECTION CERTIFICATE

As required by Clause 2.7 of the Tender Data, I/we certify that I/we have visited the site of the Works and attended the compulsory site visit and clarification meeting on the date certified below.

I/we further certify that I am / we are satisfied with the description of the Work and the explanations given by the Engineer and that I understand perfectly the work to be done, as specified and implied for the execution of this contract at the site visit and clarification meeting.

REPRESENTATIVE OF TENDERER	DATE:

SITE VISIT

This will certify that

representing

attended a Site Inspection for this Contract on.....day of20.....

REPRESENTATIVE OF EMPLOYER	DATE:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.20 QUALITY CRITERIA AND POINTS CLAIMED

1. Points for Quality Threshold

Please see criteria above.

2. Tender Evaluation Points

Description	Section number	No of Points	
		Maximum	Claimed
Bid Amount (Vat Incl.) From Pricing Data	C1.1		
Price Points {80/90 x (1-Pt-PM/Pm)}		80/90	
Specific Goals (10/5 B-BBEE Status and 10/5 Locality)	T2.2	20/10	
<u>Total Points</u>		<u>100</u>	

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SIGNATURE OF TENDERER

DATE:

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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

T2.2.21 CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal 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 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of:

(Name of Bidder)

that:

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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.

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.

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SIGNED ON BEHALF OF TENDERER

DATE:

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POSITION

NAME OF BIDDER

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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

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT RFP/01/2023-24

PORTION 2: CONTRACT

Part C1
Agreements and Contract Data

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT RFP/01/2023-24

AGREEMENTS AND CONTRACT DATA

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END OF SECTION

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Section C1.1 Forms of Offer and Acceptance

And

Contract Forms for Rendering of Services

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM OF OFFER AND ACCEPTANCE (AGREEMENT)

OFFER

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

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM

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

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

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

.....
..... 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

[Name and address of organisation]

Name and
signature of
witness

Date _____

CIDB Registration
number

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ACCEPTANCE

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

The terms of the Contract are contained in

Part C1 Agreements and Contract Data *[which includes this Agreement]*

Part C2 Pricing Data

Part C3 Scope of Work

Part C4 Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any Addenda thereto 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 the said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall within two weeks 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 at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

Signature(s)

Name(s)

Capacity

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

[Name and address of organisation]

Name and
signature of
witness

Date

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE OF DEVIATIONS

Notes:

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

1 Subject

Details

2 Subject

Details

3 Subject

Details

4 Subject

Details

5 Subject

Details

6 Subject

Details

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

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FOR THE TENDERER:

Signature(s)

Name(s)

Capacity

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

.....
[Name and address of organisation]

Name and
signature of
witness

..... Date

FOR THE EMPLOYER:

Signature(s)

Name(s)

Capacity

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

.....
[Name and address of organisation]

Name and
signature of
witness

..... Date

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

CONFIRMATION OF RECEIPT

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

the [day]

of [month]

20..... [year]

at [place]

For the Contractor:

.....
Signature

.....
Name

.....
Capacity

Signature and name of witness:

.....
Signature

.....
Name

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

CONTRACT FORM - RENDERING OF SERVICES

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

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

1. I hereby undertake to render services described in the attached bidding documents to (name of the institution)..... in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.

2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Filled in task directive/proposal;
 - Preference claims in terms of the Preferential Procurement Regulations 2022;
 - Declaration of interest;
 - Declaration of Bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)

3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.

5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

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

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES	
1
2
DATE:	

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PART 2 (TO BE FILLED IN BY THE PURCHASER)

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

<i>DESCRIPTION OF SERVICE</i>	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

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

SIGNED AT ON

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

WITNESSES

1

2

DATE:

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Section C1.2 Contract Data

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

CONTRACT DATA

GENERAL CONDITIONS OF CONTRACT

CONTRACT DATA

The General Conditions of Contract for Construction Works, Second Edition, 2010, published by the South African Institution of Civil Engineering, is applicable to this Contract and is obtainable from www.saice.org.za

Copies of these Conditions of Contract may be obtained from the South African Institution of Civil Engineering, tel. 011805 5947.

CONTRACT SPECIFIC DATA

The following contract specific data are applicable to this contract:

Part 1: Data Provided by the Employer

Clause	Description
1.1.1.5	Clause 1.1.1.5 of the GCC is replaced by the following: The "Commencement date" shall be the date the site is handed over to the Contractor.
1.1.1.13	The Defects Liability Period is twelve (12) months from the date of issuing a completion certificate
1.1.1.14	The due completion date is nine (9) months from the date of the site handover.
1.1.1.15	The employer is the MATJHABENG LOCAL MUNICIPALITY .
1.1.1.16	The Engineer is Inhouse (Matjhabeng Local Municipality).

Contractor

Witness 1

Witness 2


Employer


Witness 1


Witness 2


Clause	Description
1.1.1.26	Pricing Strategy is: Re-measurement Contract.
1.2.1.2	The employer's address for receipt of communication is: Matjhabeng Local Municipality PO Box 708 Welkom 9460 Tel No : 057 – 391 3911 Fax No : N/A Email : Lesibo.Sebatane@matjhabeng.co.za
1.2.1.2	The addresses and telephone numbers of the representing Engineer is: Matjhabeng Local Municipality PO Box 708 Welkom 9460 Tel No : 057 – 391 3911 Fax No : N/A Email : Mbalekelwa.Tshabalala@matjhabeng.co.za
1.3.3	The language of the Contract and for written communications is English
3.1.3	The Engineer shall obtain specific approval from the Employer before executing any of his functions or duties according to the following Clauses of the General Condition of Contract: 1. New Clause 3.1.3.1 “For expenditure on the Contract to exceed the Contract Price”; 2. Existing Clauses: 3.2.1 – Nomination of person as Engineer's Representative. 5.6 – Approval of the programme 5.7.2 – Work at night as well as by day 5.8 – Non-working times 5.12 – Granting of extension of time excluding Clause 5.12.2.2 (Abnormal climatic conditions) 5.13 – Reduction of penalty for delay.



Contractor


Witness 1


Witness 2

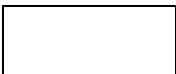

Employer

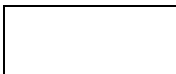

Witness 1

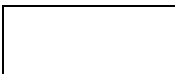

Witness 2

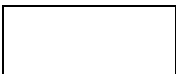
Clause	Description
	5.14.2 – The issue of a Certificate of Practical Completion. 5.14.4 – The issue of a Certificate of Completion. 5.16.1 – The issue of a Final Approval Certificate. 6.3 – Variations in respect of Variations which are not small (R20 000) 6.6 – Instruction to expend on Provisional and Prime Cost Sums 6.11 – Adjustment of General Items & Approval of Claims 8.2.2.2 – Order to repair and make good damage arising from any "excepted" risk.
3.1.4	Occupational Health, Safety & Wellness Sub Directorate – Public Health and the duly appointed H&S Officials has been appointed as Client Agents on this contract, in terms of Clause 4(5) of the Construction Regulations, 2014 as promulgated in terms of Section 43 of the Occupational Health and Safety Act, 1993. The Principal Contractor shall perform a preliminary assessment of the project generated H&S plan and submit such to Occupational Health, Safety & Wellness Sub Directorate – Public Health for legal compliance reassessment & verification / approval prior to any works commencing. The duly appointed H&S Officials will be responsible for further monitoring and the auditing of the approved H&S plan for legal compliance.
3.3	Add the following new Sub-Clause 3.3: The Employer may, at his sole discretion, provide technical support services to the Contractor or Sub Contractor(s). The technical team providing such support services will be appointed and remunerated by the Employer. In the case of EPWP Contractor Learnership Programmes, support services may be provided by the Department of Public Works. The technical team will consist of the Engineer and a person or persons acting as Training, Construction and Materials Managers or Construction Mentor, depending on the services to be provided and the scope of the functions to be executed. 3.3.1 In addition to his duties and functions in terms of 3.1.1, the Engineer will co-ordinate the work of the technical team providing the support services. 3.3.2 The Construction Manager acts as mentor to the Contractor in respect of the following functions, which are described fully in the CESA document, Guideline Contract Specific Data C4 - Construction Management Services of the Form of Agreement for Consulting Services for Labour-Intensive Construction Projects: i) Programming the execution of the works. ii) Interpretation of drawings, specifications and related contractual matters.

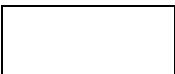

Contractor


Witness 1



Witness 2



Employer



Witness 1



Witness 2


Clause	Description
	<ul style="list-style-type: none"> iii) Workforce structuring, employment and management. iv) Guidance to expedite work progress/ improve productivity. v) Setting out of works. vi) Safety measures and legislation requirements. vii) Materials handling. viii) Tools and equipment needs. ix) Financial matters. x) Training requirements. xi) Security aspects. xii) Quality control systems.
3.3.3	<p>The Materials Manager is responsible for the following functions which are described fully in the CESA document, <u>Guideline Contract Specific Data C5 - Materials Procurement Services of the Form of Agreement for Consulting Services for Labour-Intensive Construction Projects on the Contract:</u></p> <ul style="list-style-type: none"> i) Establishment of stores. ii) Determination of store administration procedures. iii) Determination of requirements of store staff. iv) Employment of store staff. v) Staff guidance, supervision and training. vi) Acquisition of materials. vii) Issue of materials. viii) Upholding of an assets register. ix) Insurance of assets.
3.3.4	<p>The main role of the Mentor is to support the Learner Contractor and to impart knowledge that will enable the Contractor to compete independently as soon as possible. The Mentor provides a wide range of support and advice functions, including but not limited to advice with regard to:</p> <ul style="list-style-type: none"> (i) Finance and dealing with banks (ii) Business management (iii) Contract management (iv) Procurement of materials and other required services (v) Technical and engineering (vi) Construction Planning and Management (vii) Fulfilling of statutory and tax obligations



Contractor


Witness 1



Witness 2



Employer



Witness 1



Witness 2


Clause	Description
	(viii) Labour and human resource advice
4.3.1	<p>Add the following to the clause:</p> <p>“For conventional construction works the Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) shall apply and the minimum employment conditions which will apply shall be guided by the latest Sectorial Determination: Civil Engineering Sector published from time to time.</p> <p>Compliance with the National Environmental Management Act (NEMA), Act 107 of 1998.</p> <p>Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) as per Government Notice R347 of 4 May 2012 (also downloadable at www.epwp.gov.za), shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.”</p> <p>“The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2014 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993).</p> <p>Without limiting the Contractor’s obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan.”</p>
4.5	<p>Add the following new Sub-Clauses:</p> <p>4.5.5 On the request of the Contractor, the Employer may, at his sole discretion, provide a support service to the Contractor in the giving of notices and in obtaining requisite consents, permissions and permits.</p> <p>4.5.6 On the request of the Contractor and certified by the Engineer as payable by the Contractor, the Employer may, in his sole discretion, advance funds to the Contractor in the form of a cheque in favour of the relevant institution or body, to facilitate the Contractor in complying with the provisions of this Clause.</p> <p>The Contractor shall provide proof to the Engineer of all payments effected by him.</p> <p>The Employer will deduct the sums advanced by the Employer and adjusted in accordance with the Contract Price Adjustment Formula or other rise-and-fall provision applicable to the Contract, from future payment certificates of the Contractor, if such sums are payable by the Contractor in the ordinary course of his business.</p>



Contractor


Witness 1



Witness 2



Employer



Witness 1



Witness 2


Clause	Description
	The Employer will not advance funds in respect of cyclic sums payable by the Contractor in the ordinary course of his business.
4.11.3	Add the following to Clause 4.11: Notwithstanding the wording of this Clause, on request of the Contractor the Employer may at his sole discretion, provide trade-skills training to the Contractor’s employees to improve their competency and efficiency commensurate with the requirements of the Works.
5.3.1	The documentation required before Commencement of the Works are: Health and Safety Plan (Refer to Clause 4.3) Initial Programme (Refer to Clause 5.6) Security (Refer to Clause 6.2) Insurance (Refer to Clause 8.6)
5.3.2	The Contractor is required, within 28 days of the Commencement Date, to submit the documents listed below to the Engineer for his approval. <u>Health and Safety Plan</u> The Contractor shall deliver his health and safety plan, in terms of Clause 5(1) of the Construction Regulations (2014). <u>Initial Programme</u> The Contractor shall deliver his Initial Programme of work in terms of Clause 5.6 <u>Security</u> Submit a guarantee of an Insurance Company or Bank to be jointly and severally bound with the Contractor for an amount equal to 10% of the Contract Price. The wording of the Guarantee shall be identical to the pro forma provided in Part C1.2 – Annexure A of this tender document. <u>Insurance</u> Submit copies of receipts of registration, or payment for the premiums for the following insurances, as required by the new Clause 8.6 in this Contact Data. (a) Proof of registration with the Department of Labour as an employer, in terms of the Compensation for Occupational Injuries and Diseases Act 1993, as amended (b) Common Law Liability Insurance for the duration of the Contract Period and with a minimum Limit of Indemnity of not less than R1 000 000 for any one accident;



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

Clause	Description
	<p>(c) Insurance on an All-Risks basis for construction plant, equipment and other things (except those intended to incorporation into the works) brought onto the site to the full value of such construction plant, equipment and other things;</p> <p>(d) Where the Contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the site, the Contractor shall satisfy the employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication, then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.</p> <p>(e) Imported equipment or component parts or materials to be supplied in terms of this Contract which require any process of assembly or finishing in South Africa prior to delivery to the site are to be insured by the Contractor up to the commencement of transit to site of the assembled or finished equipment, component parts or materials, unless special arrangements are made with the Employer.</p> <p>These insurances shall be maintained in force for the duration of the Contract, including any Defects Liability Period and in respect of Sub-Contractors, the Contractor shall be deemed to have complied with the provisions of the requirements relating to insurance by ensuring that the Sub-Contractors have effected such insurance.</p>
5.3.2	The time to submit the documentation required before commencement with Works execution is twenty-eight (28) days.
5.8.1	The special non-working days are Public holidays, Saturdays and Sundays.
5.8.1	The year-end break commences on 15 December and ends on 09 January.
5.13.1	The Penalty for delay to achieve completion by the due completion date is 0,05% of the contract price
5.12.2	<p>Add the following clauses:</p> <p><u>Extension of time due to Abnormal Rainfall</u></p> <p>Extension of time for completion of the Contract shall be allowed in the event of abnormal rainfall in accordance with the following formula:</p>

Contractor

Witness 1

Witness 2

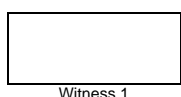
Employer

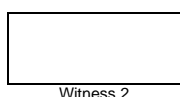
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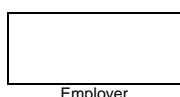
Witness 2

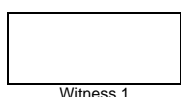
	$V = (N_w - N_n) + (R_w - R_n) / 20$ <p><i>Where:</i></p> <p>V = Extension of time in calendar days for the calendar month under consideration</p> <p>N_w = Actual number of days during the calendar month under consideration on which a rainfall of 10mm and more is recorded</p> <p>R_w = Actual total rainfall in mm recorded during the calendar month under consideration</p> <p>N_n = Average number of days, derived from rainfall records, on which a rainfall of 10mm and more was recorded during the relevant calendar month as per the tabulated data retrieved from the nearest weather station</p> <p>R_n = Average total rainfall in mm for the relevant calendar month, derived from rainfall records, as per the tabulated data retrieved from the nearest weather station</p> <p>Where the extension of time due to abnormal rainfall has to be calculated for portion of a calendar month, pro rata values shall be used. Should V be negative for any particular month, and should its absolute value exceed the corresponding value of N_n, then V shall be taken as being equal to minus N_n. The total extension of time to be granted shall be the algebraic sum of all the monthly extensions, provided that if this total is negative then the time for completion shall not be reduced due to subnormal rainfall.</p> <p>Rainfall records for the period of construction shall be taken on Site. The Contractor shall provide and install all the necessary equipment for accurately measuring the rainfall. The Contractor shall also provide, erect and maintain a security fence plus gate, padlock and keys at each measuring station, all at his own cost. The Engineer or his Representative shall take and record the daily rainfall readings. The Contractor shall be permitted to attend these readings, in the company of the Engineer's Representative. Access to the measuring gauge(s) shall at all times be under the Engineer's control.</p>
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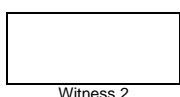

Contractor


Witness 1


Witness 2

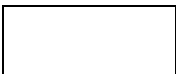

Employer

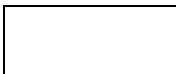

Witness 1

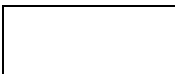

Witness 2

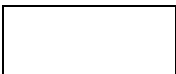
Clause	Description
	<p>The rainfall records applicable to this Contract are those recorded and updated at the Odendaalsrus Weather Station.</p> <p>Unless otherwise provided in the Site Information, the value of “n” shall be taken as equal to the tendered time for completion of the Works in months, rounded off to an integer.</p> <p>Extension of time during normal working days will be granted to the degree to which actual delays as determined, exceed the number of “n” normal working days.</p> <p>The value of “n” does not take into account further or concurrent delays which are caused by other abnormal climatic conditions such as floods, which have to be determined separately.</p>
6.3	<p>All variations shall be in writing, confirmed by the Contractor and finally approved by the Employer. The Contractor shall not perform any variation work until written approval is issued from the Employer.</p>
6.8.2	<p>The value of payment certificates is to be adjusted in accordance with the Contract Price Adjustment Schedule, where</p> <p>The value of “x” is 0,150</p> $(1-x) \left[\frac{aL_t}{L_o} + \frac{bP_t}{P_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$ <p>Fixed : Estimate less than R10 000 000 or period less than 6 months</p> <p>“L” is the “Labour Index” and shall be the “Consumer Price Index” for the urban area specified in the Contract, as published in the Statistical Release P0141.1 in table 21 of Statistics South Africa.</p> <p>“P” is the “Plant Index” and shall be the “Civil Engineering Plant” index as published in the Statistical Release P0142.1 in table 16 of Statistics South Africa.</p> <p>“M” is the “Materials Index” and shall be the price index for “Civil Engineering (Materials)” as published in the Statistical Release P0142.1 in table 15 of Statistics South Africa.</p> <p>“F” is the “Fuel Index” and shall be the index for “Civil Engineering” as published in Statistical Release P0142.1 Table 16 of Statistics South Africa.</p>

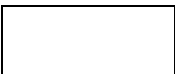

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

Clause	Description
	<p>The suffix “o” denotes the basic indices applicable to the base month, which shall be the month prior to the month in which the closing date for the tender falls.</p> <p>The suffix “t” denotes the current indices applicable to the month in which the last day of the period falls to which the relevant payment certificate relates.</p> <p>If any index relevant to any particular certificate is not known at the time when the certificate is prepared, the Engineer shall estimate the value of such index. Any correction, which may be necessary when the correct indices become known, shall be made by the Engineer in subsequent payment certificates.</p> <p>The urban area nearest the site is Welkom.</p> <p>The base month is December 2016.</p>
6.10.3	The percentage retention is 10% of the contract price.
8.6	The amount to be included in the sum insured to cover the value of: R
8.6.5	The insurance shall be undertaken with an insurance company registered in South Africa.
10.5.1	Disputes are to be referred to adjudication.
10.7.1	Disputes are to be referred for final settlement to arbitration.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

CONTRACT DATA

Section C1.2 Annexure A: Performance Guarantee

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PERFORMANCE GUARANTEE (PRO FORMA)

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Engineer" means:

"Works" means:

"Site" means:

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

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

Amount in words:

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

Amount in words:

"Expiry Date" means:

CONTRACT DETAILS

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

PERFORMANCE GUARANTEE

- 1 The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
- 2 The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
- 3 The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
- 4 Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

14 Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at

Date

Guarantor's signatory: (1)

Capacity

Guarantor's signatory (2)

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT: RFP/01/2023-24

CONTRACT DATA

Section C1.2
Annexure B: Retention Money Guarantee

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

RETENTION MONEY GUARANTEE (PRO FORMA)

ISSUED TO **MATJHABENG LOCAL MUNICIPALITY** (hereinafter called "the Employer")

ON BEHALF OF *[INSERT NAME OF CONTRACTOR]* (hereinafter called "the Contractor")

in connection with CONTRACT NO:(hereinafter called "the Contract").

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

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

1 Each demand by the Employer shall be in writing, signed by the Employer and delivered to us at *[INSERT GUARANTOR'S FULL STREET ADDRESS]* or such other address in..... *[INSERT NAME OF COUNTRY]* as we shall in writing notify to the Employer, and shall be accompanied by a certificate complying with Clause 2, signed by the Engineer in office as such in terms of the Contract.

2 The Engineer's certificate referred to in Clause 1 shall certify that:

- (a) he is the Engineer in office as such in terms of the Contract,
- (b) the Contractor is in breach of his obligations under the Contract, and
- (c) the amount demanded, which amount the certificate shall specify, does not exceed
 - (i) the amount of retention moneys which, but for this guarantee, would have been retained by the Employer in terms of the Contract at the date of the certificate, less the aggregate of the amounts of retention money actually retained by the Employer and the amounts previously paid by us to the Employer in terms hereof,
 - (ii) a genuine estimate of the cost to the Employer of having the breach referred to in paragraph (b) remedied less the aggregate of any amounts withheld by the Employer from payments due to the Contractor in terms of the Contract by reason of the breach referred to, and any amount of retention money actually held by the Employer save to the extent that the same had been deducted from any previous demand in terms hereof;

3 We shall within days after our receipt of a demand complying with the provisions in Clauses 1 and 2 make payment to the Employer of the amount demanded at *[INSERT EMPLOYER'S STREET ADDRESS]* or at such other address in *[INSERT EMPLOYER'S COUNTRY]* as the Employer shall in writing notify to us.

4 Subject to compliance with the provisions hereof, our liability to make the payments herein referred to

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

shall be unconditional and shall not be affected or diminished by any disputes, claims or counterclaims between the Employer and the Contractor.

- 5 Our aggregate liability under this guarantee is limited to.....*[INSERT AMOUNT OF GUARANTEE IN WORDS]* (R..... *[INSERT AMOUNT OF GUARANTEE IN FIGURES]*).
- 6 This guarantee shall expire on the date on which the last of the retention moneys, which but for this guarantee would have been retained by the Employer, becomes payable to the Contractor.
- 7 This guarantee is not transferable and must be produced for endorsement if any part payment is made and must be returned to us against final payment of our aggregate liability or on the date of the expiry of the guarantee in terms of Clause 6, whichever is the earlier.

Signed in the presence of the subscribing witnesses:

Atfor and on behalf of

.....

on this the day of 20.....

SIGNATURE :

CAPACITY :

ADDRESS :

:

:

AS WITNESSES : 1

2

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

CONTRACT DATA

Section C1.2

Annexure C: Additional Conditions of Contract

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

THE ADDITIONAL CONDITIONS OF CONTRACT ARE:

Clause

Add new Clause 4.3.2:

"4.3.2 Applicable labour laws

The Ministerial Determination, Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act, 1997 by the Minister of Labour in Government Notice No R347 of 4 May 2012, as reproduced below, shall apply to works described in the Scope of Work as being labour-intensive and which are undertaken by unskilled or semi-skilled workers.

1 Introduction

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on Expanded Public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a EPWP.

1.2 In this document:

- (a) "department" means any department of the State, implementing agent or Contractor;
- (b) "employer" means any department, implementing agency or Contractor that hires workers to work in elementary occupations on a EPWP;
- (c) "worker" means any person working in an elementary occupation on a EPWP;
- (d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;
- (e) "management" means any person employed by a department or implementing agency to administer or execute a EPWP;
- (f) "task" means a fixed quantity of work;
- (g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
- (h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
- (i) "time-rated worker" means a worker paid on the basis of the length of time worked.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

2 Terms of work

2.1 Workers on a EPWP are employed on a temporary basis.

Clause

3 Normal hours of work

3.1 An employer may not set tasks or hours of work that require a worker to work:

- (a) more than forty hours in any week
- (b) on more than five days in any week; and
- (c) for more than eight hours on any day.

3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.

3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

4 Meal breaks

4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

4.2 An employer and worker may agree on longer meal breaks.

4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5 Special conditions for security guards

5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6 Daily rest period

Every worker is entitled to a daily rest period of at least twelve consecutive hours.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7 Weekly rest period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work (“emergency work”).

8 Sick leave

8.1 Only workers who work more than 24 hours per month have the right to claim sick-pay in terms of this clause.

8.2 A worker who is unable to work on account of illness or injury is entitled to claim one day’s paid sick leave for every full month that the worker has worked in terms of a Contract.

8.3 A worker may accumulate a maximum of twelve days sick leave in a year.

8.4 Accumulated sick leave may not be transferred from one Contract to another Contract.

8.5 An employer must pay a task-rated worker the worker’s daily task rate for a day’s sick leave.

8.6 An employer must pay a time-rated worker the worker’s daily rate of pay for a day’s sick leave.

8.7 An employer must pay a worker sick pay on the worker’s usual pay day.

8.8 Before paying sick pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is:

(a) absent from work for more than two consecutive days; or

(b) absent from work on more than two occasions in any eight-week period.

8.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

8.10 A worker is not entitled to pay sick leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Clause

9 Maternity leave

- 9.1 A worker may take up to four consecutive months unpaid maternity leave.
- 9.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.
- 9.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- 9.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- 9.5 A worker may begin maternity leave:
 - (a) four weeks before the expected date of birth; or
 - (b) on an earlier date:
 - (i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - (ii) if agreed to between employer and worker; or
 - (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- 9.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

10 Family responsibility leave

- 10.1 Workers who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances:
 - (a) when the employee's child is born;
 - (b) when the employee's child is sick;
 - (c) in the event of a death of:
 - (i) the employee's spouse or life partner;
 - (ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Clause

11 Statement of conditions

11.1 An employer must give a worker a statement containing the following details at the start of employment:

- (a) the employer's name and address and the name of the EPWP;
- (b) the tasks or job that the worker is to perform; and
- (c) the period for which the worker is hired or, if this is not certain, the expected duration of the Contract;
- (d) the worker's rate of pay and how this is to be calculated;
- (e) the training that the worker will receive during the EPWP.

11.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

11.3 An employer must supply each worker with a copy of these conditions of employment.

12 Keeping records

12.1 Every employer must keep a written record of at least the following:

- (a) the worker's name and position;
- (b) copy of an acceptable worker identification;
- (c) in the case of a task-rated worker, the number of tasks completed by the worker;
- (d) in the case of a time-rated worker, the time worked by the worker;
- (e) payments made to each worker.

12.2 The employer must keep this record for a period of at least three years after the completion of the EPWP.

13 Payment

13.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

13.2 A worker may not be paid less than the minimum EPWP wage rate per day or per task as per the Ministerial Determined sector rate for the EPWP which is reviewed each year.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

13.3 A task-rated worker will only be paid for tasks that have been completed.

13.4 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the Contractor having submitted an invoice to the employer.

13.5 A time-rated worker will be paid at the end of each month.

13.6 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

13.7 Payment in cash or by cheque must take place:

- (a) at the workplace or at a place agreed to by the worker;
- (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
- (c) in a sealed envelope which becomes the property of the worker.

13.8 An employer must give a worker the following information in writing:

- (a) the period for which payment is made;
- (b) the numbers of tasks completed or hours worked;
- (c) the worker's earnings;
- (d) any money deducted from the payment;
- (e) the actual amount paid to the worker.

13.9 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

13.10 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

14 Deductions

14.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

14.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

14.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

requirements specified in the agreement law, court order or arbitration award concerned.

14.4 An employer may not require or allow a worker to:

- (a) repay any payment except an overpayment previously made by the employer by mistake;
- (b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
- (c) pay the employer or any other person for having been employed.

Clause

15 Health and safety

15.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

15.2 A worker must:

- (a) work in a way that does not endanger his/her health and safety or that of any other person;
- (b) obey any health and safety instruction;
- (c) obey all health and safety rules of the EPWP;
- (d) use any personal protective equipment or clothing issued by the employer;
- (e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

16 Compensation for injuries and diseases

16.1 It is the responsibility of the employers (other than a Contractor) to arrange for all persons employed on a EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases 1993, (Act No. 130 of 1993).

16.2 A worker must report any work-related injury or occupational disease to their employer or manager.

16.3 The employer must report the accident or disease to the Compensation Commissioner.

16.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

17 Termination

- 17.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 17.2 A worker will not receive severance pay on termination.
- 17.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- 17.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the Contract. However, the worker may be re-engaged if a position becomes available.
- 17.5 A worker who does not attend required training events, without good reason, will have terminated the Contract. However, the worker may be re-engaged if a position becomes available.

Clause

18 Certificate of service

- 18.1 On termination of employment, a worker is entitled to a certificate stating:
- (a) the worker's full name;
 - (b) the name and address of the employer;
 - (c) the EPWP on which the worker worked;
 - (d) the work performed by the worker;
 - (e) any training received by the worker as part of the EPWP;
 - (f) the period for which the worker worked on the EPWP;
 - (g) any other information agreed on by the employer and worker."

Add new sub clause 6.10.1.9:

"6.10.1.9 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."

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

CONTRACT DATA

Section C1.2

Annexure D: Agreement in Terms of the Occupational Health and Safety Act

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(ACT NO 85 OF 1993)

THIS AGREEMENT made at

on this the day of in the year

between **MATJHABENG LOCAL MUNICIPALITY** [hereinafter called "the Employer"] of the one part,
herein represented by

in his capacity as

and

[hereinafter called "the Mandatary"] of the other part, herein represented by

.....

in his capacity as

WHEREAS the Employer is desirous that certain works be constructed, viz

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM

and has accepted a Tender by the Mandatary for the construction, completion and maintenance of such Works and whereas the Employer and the Mandatary have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatary with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1 The Mandatary 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 Approval Certificate issued in terms of Clause 5.16.1 (GCC 2015) of the General Conditions of Contract [hereinafter referred to as "the GCC"], or
 - (b) the date of termination of the Contract in terms of Clauses 9.1, 9.2 or 9.3 (GCC 2015) of the GCC.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 3 The Mandatary declares himself to be conversant with the following:
- (a) All the requirements, regulations and standards of the Occupational Health and Safety Act, 1993 (Act No 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 mandataries, and
 - (iv) Subsection 37(2) relating to the purpose and meaning of this Agreement.
 - (b) The procedures and safety rules of the Employer as pertaining to the Mandatary and to all his subcontractors.
- 2 In addition to the requirements of Clause 8.4 (GCC 2015) of the GCC and all relevant requirements of the Contract, the Mandatary agrees to execute all the Works forming part of this Contract and to operate and utilise all machinery, plant and equipment in accordance with the Act.
- 3 The Mandatary is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Employer.
- 4 The Mandatary warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 which cover shall remain in force whilst any such workmen 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.
- 5 The Mandatary undertakes to ensure that he and/or subcontractors and/or their respective employers will at all times comply with the following conditions:
- (a) The Mandatary shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatary shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatary 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 Mandatary 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 inquiry conducted in terms of Section 32 of the Occupational Health and Safety Act into any incident involving the Mandatary and/or his employees and/or his subcontractors.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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 2.....

NAME 1 2

(IN CAPITALS)

SIGNED FOR AND ON BEHALF OF THE MANDATARY:

WITNESS 1 2.....

NAME 1 2

(IN CAPITALS)

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Part C2 Pricing Data

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

PRICING DATA

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END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Section C2.1 Pricing Instructions

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

PRICING INSTRUCTIONS

1. GENERAL

These pricing instructions provide the Tenderer with guidelines and requirements with regard to the completion of the bill of quantities. These pricing instructions also describe the criteria and assumptions which will be assumed in the Contract to have been taken into account by the Tenderer when developing his prices.

The bill of quantities shall be read with all the documents which form part of this Contract.

The following words have the meaning hereby assigned to them:

- Unit : The Unit of measurement for each item of work in terms of the Scope of Work.
- Quantity : The number of units for each item.
- Rate : The payment per unit of work at which the tenderer tenders to do the work.
- Amount : The product of the quantity and the rate tendered for an item.
- Lump sum : An amount tendered for an item, the extend of which is described in the Pricing Instructions, Bill of Quantities or the Scope of Work but the quantity of work of which is not measured in any units.

2. PAY ITEMS

The method of measurement published by the South African Bureau of Standards in Clause 8 of the Standardised Specifications for Civil Engineering Construction (SABS 1200) is applicable, subject to the variations and amendments contained in section C3.6.1.

Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standard Specifications. The measurement and payment clause of each Standard 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 Standard Specification, or the Scope of Work, conflict with the terms of the Bill of Quantities, the requirements of the Standard Specification or Scope of Work, as applicable, shall prevail.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The item numbers appearing in the Bill of Quantities refer to the corresponding item number in the standard specifications or as amended in the Scope of Work. In the letter case, the item number is prefixed with the letter “B”. The same applies to new clauses added to the standard specification.

The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1000kg)
m ²	=	square metre	No.	=	number
m ² .pass	=	square metre pass	sum	=	lump sum
ha	=	hectare	MN	=	meganewton
m ³	=	cubic metre	MN.m	=	meganewton-metre
m ³ .km	=	cubic metre-kilometre	PC sum	=	Prime Cost Sum
l	=	litre	Prov sum	=	Provisional sum
kl	=	kilolitre	%	=	per cent
MPa	=	megapascal	kW	=	kilowatt

3. QUANTITIES

- 3.1 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- 3.2 The quantities set out in the Bill of Quantities are the estimated quantities of the Works, and do not necessarily represent the actual amount of work to be done. The quantities certified for payment, and not the quantities given in the Bill of Quantities, shall be used for determining payments to the Contractor. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.

4. RATES

- 4.1 The prices and rates to be inserted in the Bill of Quantities are to be full inclusive prices 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 tender 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 4.2 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 or where a word or phrase such as “included” or “provided elsewhere” will be accepted as a rate of nil (R0,00) having been entered against such items and covered by the other prices or rates in the schedule.
- Any work executed to which such a pay item applies, shall be measured under the appropriate items in the Bill of Quantities and valued at a rate of nil (R0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.
- 4.3 The Tenderer shall fill in a rate against all items where the words “rate only” appears in the amount column. The intention is that, although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item be actually required.
- 4.4 Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the “Amount” column and show the corresponding total tendered price.
- 4.5 The Tenderer shall not group together a number of items and tender one rate for such group of items.
- 4.6 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 discarded.
- 4.7 All prices and rates entered in the Bill of Quantities must be **excluding Value Added Tax (VAT)**. VAT will be added last on the summary page of the Bill of Quantities.
- 4.8 Should excessively high unit prices be tendered, such prices may be of sufficient importance to warrant rejection of a tender by the Employer.

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

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT: RFP/01/2023-24

Part C3
Scope of Work

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-PAYMENT SYSTEM

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SCOPE OF WORK

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Contractor

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Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

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Section C3.1 Description of the Works

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1. Introduction

MATJHABENG LOCAL MUNICIPALITY (MLM) has an installation base of approximately 30,000 pre-payment and conventional customers, with an almost 50/50 split. Out of this total about 4000 customers are Large Power Users and will be among the first to be targeted for conversion, another 1800 are key/bulk customers who are on AMR and ToU (not in the scope of this RFP).

2. Minimum Submission Requirements – Any omission of the listed items would render an automatic disqualification.

- 2.1 Two (2) letters of references from previous companies where similar work was done.
- 2.2 Valid original tax clearance certificate.
- 2.3 Supply municipal services (water, sanitation, rates and electricity) clearance certificate or Lease Agreement with a Current Bill of Account not owing more than 30 days not owing more than thirty (30) days or Lease Agreement.

3. Scope of Work

The scope of this bid document includes the following requirements and services relating to the supply and installation of Smart Meters and the associated system:

This specification sets the required minimum level of functionality for Meters that are required to manage residential and commercial meters in the areas currently supplied by MLM.

Presently, residential and commercial customers are supplied by means of single and three phase kWh meters while Bulk customers are supplied by means of three phase quadrant meters. Single and three phase kWh meters should be configurable to credit or in pre paid mode. The minimum functional requirements are:

- The meters shall allow for the monitoring, remote metering, control and reporting on electricity consumption via a two-way communication system from a centralized computerized master station.
- The system master station includes facilities for remote disconnection of kWh meters as well as two auxiliary switched outputs to enable geyser and appliance control for all kWh meters.
- Remote visual data panels will be available for installation in a customer's home or office for interaction of the customer with the system to view tariffs, consumption levels, cost of consumption as well as switching status.
- The meters should allow for Time-of-Use tariff structures to be remotely configurable.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- The system shall support a standard protocol to enable the master station to interface to meters from various manufacturers supporting this protocol. Suitable interfaces to the existing billing, vending and meter management systems will be developed and supplied.

Contractor

Witness 1

Witness 2

Employer

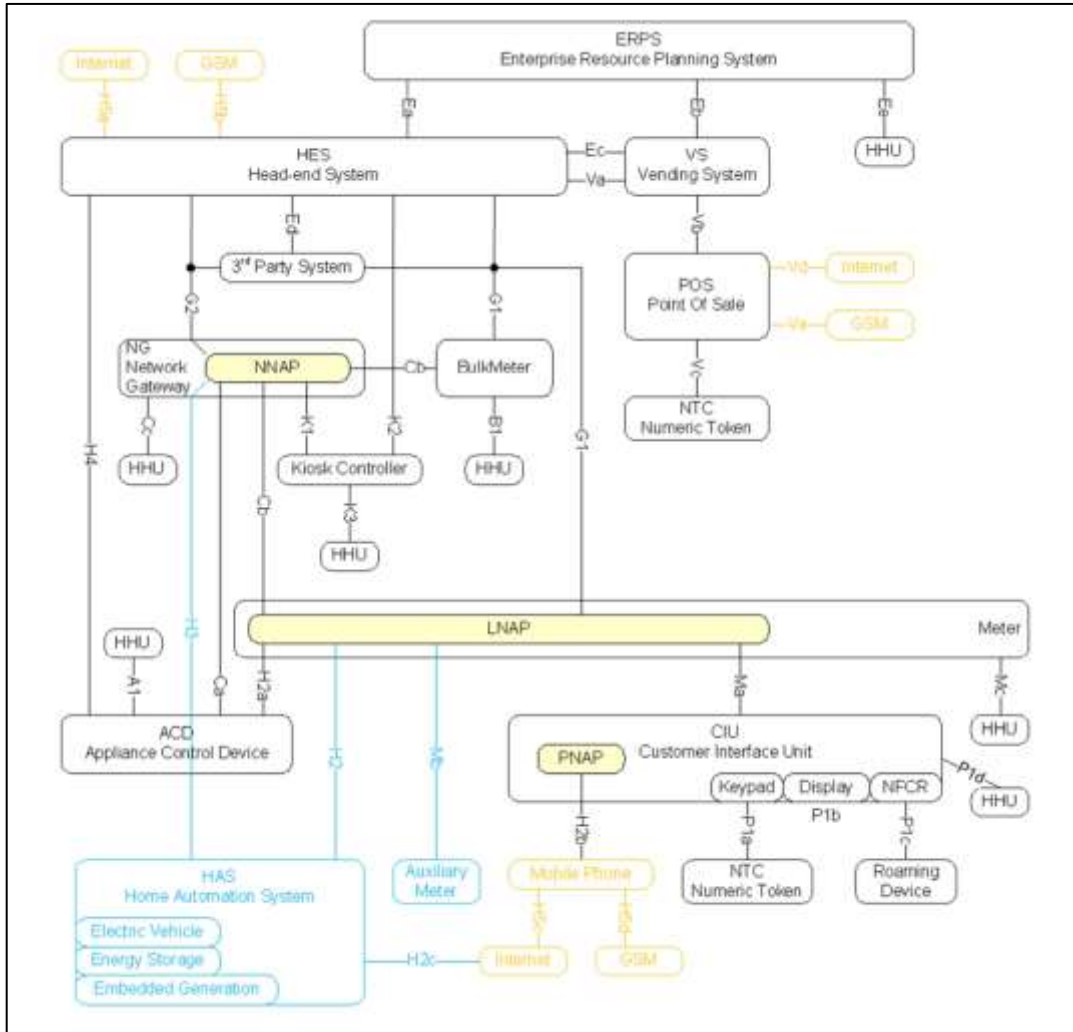
Witness 1

Witness 2

SPECIFICATIONS

SECTION 1:

1. GENERAL SPECIFICATION AND THE NETWORK REFERENCE ARCHITECTURE (NRS049:2016) FOR DOMESTIC SMART METERING PRE AND POST PAID SYTEM AS INDICATED IS APPLICABLE



Contractor

Witness 1

Witness 2

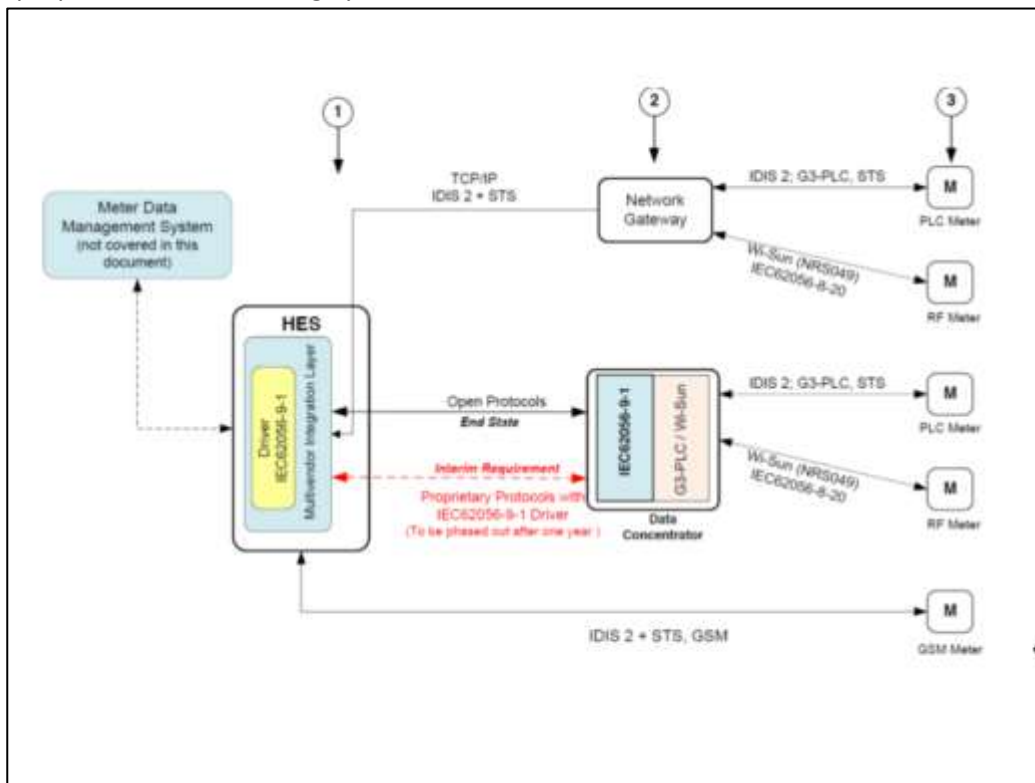
Employer

Witness 1

Witness 2

1.1 Scope

The proposed Smart Metering System can be Illustrated as follows as to the Eskom General Specifications:



NOTE: Although G3-PLC is required as the standard offering for the communication between the meter and the Customer Interface Unit (CIU), the system that is proposed must also have the twin-pair communications capability between the meter and the Customer Interface Unit (CIU), also a proven (in the field with different conditions) and working RF communication capability between the two will be advantageous.

All equipment and systems needs to be fully compliant to the NRS 049 which covers the entire smart metering system from the enterprise level down to the end device and addresses the following aspects:

- a) consideration is given to the entire smart metering infrastructure from a systems perspective, defining a communication reference architecture, from which sub-systems may be derived for implementation,
- b) it allows the identification of specific functionalities and use cases in order to realize particular business objectives,
- c) it specifies communications interfaces by reference to open international standards, thus ensuring interoperability and interchange-ability of equipment within the bounds of the system,
- d) the reference model is extensible to allow for future expansion and integration of developing new technologies,


Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2


- e) the architecture is modelled on the standard network framework as described in IEC 62056-1-0 and allows several network topologies such as mesh, star and peer-to-peer,
- f) the communication interfaces are modelled on the open systems interconnect protocol stack; NOTE The application layer is based on the DLMS/COSEM IEC 62056 suite and also allows a variety of international open standard lower layer communication interfaces to be implemented; and
- g) connectivity and routing ability is ensured at the open systems interconnect network layer, allowing IPv6 addressing and "route-over" (RPL) routing protocols; NOTE The interest of RPL is to offer a consistent pure networking architecture in line with IP architecture and forward integration of new developing technologies such as the internet of things (IoT).
- h) several devices and systems are identified and considered;
 - i) enterprise system,
 - ii) vending system ,
 - iii) point of sale,
 - iv) 3rd party system,
 - v) head end system,
 - vi) network gateway,
 - vii) kiosk controller,
 - viii) meter,
 - ix) customer interface unit,
 - x) hand-held unit,
 - xi) appliance control device,
 - xii) auxiliary meter interface for water or gas meter,
 - xiii) integration of mobile phone, GSM, internet technologies and private networks, and
 - xiv) home automation system, such as electric vehicle, energy storage and embedded generation.
- i) j) type test requirements for devices are based on existing standards such as SANS 1524, IEC 62052 series, IEC 62053 series, IEC 62054 series, IEC 62055 series and IEC 62056 series;
- j) k) guidance to purchasers is given in informative Annex B.
- k) Requirements for devices that are installed outside of buildings and not inside a protective enclosure are not in the scope of this specification. NRS 049:2016 4 Health and safety issues are not in the scope of this specification, which are dealt with in other appropriate regulatory instruments.


For the sake of clarity, the enterprise resource planning system, head-end system, vending system and point of sale are defined as separate entities, but in practice these may be integrated into one or more systems depending on the specific installation requirements. However, the interface requirements remain the same for each functionality.


The Ea interface does not offer the same functionality as the G1 and G2 interfaces. The enterprise resource planning system will therefore not be able to perform all the actions that the head-end system is capable of.



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

In this edition of the specification the account is located in the meter when configured in prepayment mode. When the meter is configured in post-payment mode, the meter behaves like a traditional billing meter with the account typically located in the traditional billing system.

A single device meter has the customer interface unit functionality integrated into the meter, whereas a multi-device installation (e.g. split meter) may have the customer interface unit as a separate device. Both cases are covered in this specification.

Interfaces to internet and global system for mobile communication for transferring the STS 20 digit token carrier from the point of sale to the Meter are considered, but these are not covered in detail.

Interfaces to internet and global system for mobile communication for transferring messages from the head-end system to the meter are considered, but these not covered in detail.

A standard interface for the NG to the kiosk controller is provided, but the detail of the kiosk controller is not covered in this specification.


Some details in clauses 4.2; 4.4.22, 4.4.28, 5.1, 5.6, 6.3.3, 6.3.12, 6.4.3, D.1, and E.1 are not covered in this edition of NRS 049, but shall be covered in a national companion specification with full participation of industry:


For a future edition of this specification, the following detailed requirements are to be defined by the service provider:

- a) PDU syntax of the P1c NFC interface;
- b) EA11 encryption algorithm of the P1c STS interface;
- c) interface Vd between POS and internet;
- d) interface Ve between POS and GSM;
- e) alternative interface Cb between NG and meter;
- f) interface Mb between CIU and auxiliary meter;
- g) interface H2 between Meter and HAS;
- h) interface H3 between NG and HAS;
- i) interface H5a between HES, internet and mobile phone;
- j) interface H5b between HES and GSM;
- k) details of use case Credit Export Energy Local;
- l) details of use case Reduce Demand By Critical Peak Price Control;
- m) detailed design for credit export energy tariff;
- n) detailed design for credit critical peak pricing tariff;
- o) detailed design for Kiosk monitoring and control function; 5 NRS 049:2016 authentication requirements for kiosk management;
- p) detailed design of COSEM objects for Kiosk management;
- q) physical layer for K1 interface;
- r) metering parameters for water and gas meters;
- s) mounting requirements for 3 phase DIN rail meters; and
- t) mounting requirements for DIN rail network gateways.


Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

1.2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 7856:2013, Code of practice for special design and other features of alternating current watt-hour meters for active energy (MID accuracy classes A and B) for use in the UK.

IEC 61968-6, Application integration at electric utilities — System interfaces for distribution management — Part 6: Interfaces for maintenance and construction.

IEC 61968-8, Application integration at electric utilities — System interfaces for distribution management — Part 8: Interfaces for customer operations.

IEC 61968-9, Application integration at electric utilities — System interfaces for distribution management — Part 9: Interfaces for meter reading and control.

IEC 62052-11, Electricity metering equipment (ac) — General requirements, tests and test conditions — Part 11: Metering equipment.

IEC 62052-21, Electricity metering equipment (ac) — general requirements, tests and test conditions — Part 21: Tariff and load control equipment.

IEC 62053-52, Electricity metering equipment (AC) — Particular requirements — Part 52: Symbols.

IEC 62055-21 TR, Electricity metering — Payment systems — Part 21: framework for standardization.

IEC 62055-41: Electricity metering — Payment systems — Part 41: Standard transfer specification (STS) - Application layer protocol for one-way token carrier systems.

NOTE IEC 62055-41 Ed3 is currently under development and it will replace the following standards when it is published in 2016. In the mean time all references to IEC 62055-41 shall refer to those listed below:

- a) IEC 62055-41 Ed2, Electricity metering - Payment systems - Part 41: Standard transfer specification (STS) - Application layer protocol for one-way token carrier systems
- b) STS 202-1, Addendum to IEC 62055-41 - Electricity metering payment systems –Currency Token
- c) STS 202-2, Addendum to IEC62055- 41: Standard transfer specification (STS) – Common Coded PAN for 2 and 4 Digit Manufacturer Codes
- d) STS 202-3, Addendum to IEC62055- 41: Payment Systems - Standard Transfer Specification (STS) - Cryptographic enhancements

IEC 62055-51, Electricity metering — Payment systems — Part 51: Standard transfer specification (STS) - Physical layer protocol for one-way numeric and magnetic card token carriers.

IEC 62056-1-0, Electricity metering data exchange — Part 1-0: Smart metering standardization framework.

IEC 62056-4-7, Electricity metering — Data exchange for meter reading, tariff and load control— Part 47: COSEM transport layers for IPv4 networks.

IEC 62056-5-3, Electricity Data Exchange — The DLMS/COSEM suite — Part 5-3: DLMS/COSEM application layer. NRS 049:2016 6

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

NOTE IEC 62056-5-3 Ed3 is currently under development and is expected to be published in March 2017, at which time it will become normative. In the mean time all references to IEC 62056-5-3 shall refer to the DLMS UA Green Book Ed 8 (see Bibliography).

IEC 62056-6-1, Electricity metering data exchange — The DLMS/COSEM suite — Part 6-1: Object identification system (OBIS).

NOTE IEC 62056-6-1 Ed3 is currently under development and is expected to be published in March 2017, at which time it will become normative. In the mean time all references to IEC 62056-6-1 shall refer to the DLMS UA Blue Book Ed 12 (see Bibliography)

IEC 62056-6-2, Electricity metering data exchange — The DLMS/COSEM suite — Part 6-2: COSEM interface classes.

NOTE IEC 62056-6-2 Ed3 is currently under development and is expected to be published in March 2017, at which time it will become normative. . In the mean time all references to IEC 62056-6-2 shall refer to the DLMS UA Blue Book Ed 12 (see Bibliography)

IEC/TS 62056-6-9, Electricity metering data exchange — Part 6-9: Mapping between the Common Information Model message profiles (IEC 61968-9) and DLMS/COSEM (IEC 62056) data models and protocols.

IEC 62056-7-6, Electricity metering data exchange — The DLMS/COSEM suite — Part 7-6: The 3- layer, connection-oriented HDLC based communication profile.

IEC 62056-8-20, Electricity metering data exchange — The DLMS/COSEM suite — Part 8-20: Mesh communication profile for neighbourhood networks.

NOTE IEC 62056-8-20 is currently at DTS stage and is expected to be published in August 2016.

IEC/TS 62056-9-1, Electricity metering data exchange — The DLMS/COSEM suite — Part 9-1: Communication profile using web-services to access a DLMS/COSEM server via a COSEM Access Service (CAS).

IEC 62056-9-7, Electricity metering data exchange — The DLMS/COSEM suite — Part 9-7: Communication profile for TCP-UDP/IP networks.

IEC 62056-21, Electricity metering - Data exchange for meter reading, tariff and load control - Part 21: Direct local data exchange.


IEC 62056-46, Electricity metering — Data exchange for meter reading, tariff and load control— Part 46: Data link layer using HDLC protocol.


IEEE 802.11, IEEE Standard for Information technology — Telecommunications and information exchange between systems local and metropolitan area networks — Specific requirements Part 11: Wireless LAN medium access control (MAC) and physical layer (PHY) specifications.


IEEE 802.15.4e-2012, Part 15.4: Low-rate wireless personal area networks (LR-WPANs) Amendment 1: MAC sublayer.


IEEE 802.15.4g-2012, Part 15.4: Low-rate wireless personal area networks (LR-WPANs) Amendment 3: Physical layer (PHY) Specifications for low-data-rate, wireless, smart metering utility networks.



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

IEEE 1901.2 2013, Standard for low-frequency (less than 500 kHz) narrowband power line communications for smart grid applications.

ISO/IEC 14443-1, Identification cards — Contactless integrated circuit(s) cards — Proximity cards — Part 1: Physical characteristics. 7 NRS 049:2016

ISO/IEC 14443-2, Identification cards — Contactless integrated circuit(s) cards — Proximity cards — Part 2: Radio frequency power and signal interface.

ISO/IEC 14443-3, Identification cards — Contactless integrated circuit(s) cards — Proximity cards — Part 3: Initialization & anticollision.

NRS 096-1, Electricity metering — Ancillary specifications — Part 1: The sealing of electricity meters.

IETF RFC 768, User Datagram Protocol Edited by J. Postel. August 1980.

IETF RFC 2460, Internet Protocol, Version 6 (Ipv6) Specification.

IETF RFC 4944, Transmission of IPv6 Packets over IEEE 802.15.4 Networks.

IETF RFC 6282-2011, Compression format for IPv6 datagrams over IEEE 802.15.4-based networks.

IETF RFC 6550, IPv6 routing protocol for low-power and lossy networks.

SANS 164-1, Plug and socket-outlet systems for household and similar purposes for use in South Africa — Part 1: Conventional system, 16 A 250 V a.c.

SANS 474/NRS 057, Code of practice for electricity metering.

SANS 1524-1, Electricity payment systems — Part 1: Payment meters.

SANS 1524-1-1, Electricity payment systems — Part 1-1: Mounting and terminal requirements for payment meters.

SANS 1524-6-10, Electricity payment systems Part 6-10: Interface standards — Online vending server — Vending clients.

SANS 10142-1, Wiring of premises – Part 1: Low voltage installations.


STS 101-2, Standard transfer specification — Physical layer protocol for a two-way virtual token carrier for remote connection over DLMS/COSEM.


NIST SP800-56Ar2, Special publication 800-56A Revision 2 - Recommendation for pair-wise key establishment schemes using discrete logarithm cryptography.


NIST SP800-90A, Deterministic random bit generator validation system (DRBGVS).


FIPS PUB 140-2, Security requirements for cryptographic modules.



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

SECTION 2:

2. DETAILED SPECIFICATION

2.1 Single Phase DIN Rail Split meter:

2.1.1 Introduction

The single phase needs to be DIN-Rail smart prepayment meters and is an advanced single-phase, keypad-based, smart pre- and post- payment meter in a DINRail housing and terminal format that complies with the mechanical requirements of the NRS049 specification.

The meter solution needs to incorporate powerful e-metering functionality combined with STS prepayment and uses open standard OFDM G3-PLC communications between the meter, the customer interface unit and a PLC Data Concentrator.


2.1.2 Overview


The single-phase DIN-Rail meter needs to be split pre- and post-payment meter that is based on already proven smart meter solutions and incorporates powerful smart metering functionality combined with STS prepayment and post payment capabilities.


The meter solution needs to offers prepayment mode functionality as well as smart functionality such as remote disconnection and reconnection and switching to post-payment mode


2.1.3 Features


- Single-phase, 2 wire DIN-Rail smart prepayment PLC meter which works with a PLC Customer Interface Unit
- Integrated OFDM G3-PLC transceiver for two-way communications between the meter, the Customer Interface Unit and the DC450 Data Concentrator
- Data Concentrator communications via WAN to the Head-end System (HES)
- Open standards for interoperability • Open STS prepayment (IEC62055-41/51)
- dlms/COSEM • Open International standard for PLC communications - OFDM G3-PLC
- Housing format suitable for mounting on a 35mm DIN rail or alternative hanging bracket and flush mounting facilities, with 4 terminal layout that complies with the mechanical requirements of the NRS049 specification
- IP 54 degree of protection
- Bottom connect terminals for ease of retrofit and efficient wiring layouts in pole-top enclosures or street kiosks (4 terminals with two neutral terminals, L,N,N,L format) • Long and short terminal cover options
- Zero power tamper sensing when meter is not powered
- Event trigger and fraud logs with date and time stamps in the on-line mode
- Voltage threshold settings with events logged when thresholds are exceeded



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

- Remote disconnect and reconnect supported by the E460S variant in the on-line mode
- Demand supervision and power-limit capabilities
- Four quadrant measurement with separate import and export registers
- Changeable metering modes by means of dlms special command set
- Modes supported: kWh transfer STS Prepayment, Smart Prepayment TOU with STS Currency token transfer TOU and Post payment
- Emergency credit
- Real Time Clock – synchronised by the Data Concentrator in the on-line configuration mode • Time of Use, with STS currency token transfer option in the prepayment mode
- LCD display on the CIU
- Various options on the Customer Interface Unit for scrolling operating display list or standard display list that may be stepped through with a scroll keypress on the CIU

2.1.4 Split meter functionality

The split metering solution consists of two parts, the meter and the customer interface unit.

Communication between the meter and the customer interface unit is by means of G3-PLC Power Line Carrier, using existing household wiring; no additional communication wires are required.

The Customer Interface Unit is compact with a user-friendly keypad and display. It may be installed in any convenient location in the consumer’s home where there is an electrical socket outlet. An easily replaceable battery is provided for communicating in the absence of AC mains power e.g. when the meter is out of credit.

The meter needs to contain all critical metering, token decryption, load control and smart meter functionality. It operates independently and is immune to any form of tampering on the Customer Interface Unit. The 1ph DIN-Rail meter is typically installed in a pole-top enclosure or secure street kiosk and its small size enables a smaller street kiosk to be used. When used in conjunction with the G3-PLC Data Concentrator, the meter is able to operate in an on-line mode

2.1.5 Customer Interface Unit (CIU)

The CIU is plugged into an existing mains outlet in the household. Under normal conditions when the load switch of the meter is closed and there is power in the house, the Customer Interface Unit operates directly from mains voltage.

However in the event that the meter load switch opens (e.g. could be due to prepayment credit expiring), the Customer Interface Unit, which is fitted with a battery, will enter a sleep mode to save battery energy. By pressing and holding the “Enter/Power key” on the keypad, the customer is able to

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

power up the Customer Interface Unit using the battery and enable a new prepayment credit token to be entered. If there is no power in the household and the customer interface unit is woken up using the battery, the display will flash on and off, showing the user the last known status of the meter, for example prepayment credit expired.

The customer or field technician can additionally view meter parameters by accessing specific register information via the Customer Interface Unit keypad or by scrolling through the available pre-configured registers, by pressing the scroll up and down buttons on the P160 keypad

2.1.6 Advance Metering Interface (AMI)

The meter solution needs to be capable of “upstream” PLC communication to a Data Concentrator typically installed at a street kiosk, low-voltage distribution transformer or mini sub-station and “downstream” PLC communications to the Customer Interface Unit.

When the Data Concentrator and back-end (Head-end system) is in place, the meter forms parts of an end-to-end Advanced Metering Infrastructure (AMI) system and powerful e-metering and prepayment capability is able to be supported.

When the meter is used in conjunction with a Data Concentrator and head-end system and forms part of the AMI infrastructure, it supports extensive and powerful e-metering functionality, such as:

- two way communications
- real time clock synchronised by the system
- post-payment or prepayment modes supported by the same variant
- standard kWh STS token transfer or smart prepayment with currency TOU STS prepayment token
 - remote disconnect and reconnect supported by the meter variant
- Event and fraud notifications Using a special set of dlms commands, the meter modes can be switched between post-payment and prepayment modes.

2.1.7 Smart e-meter function

The meter is able to be configured both locally via the IEC 62056-21 optical interface using ACD meter configuration suite of software, and remotely via the Head-end System when in the on-line mode.

Real time clock (RTC) is remotely synchronised by the Head-end System if the meter is used in conjunction with a Data Concentrator and system.

When used in an on-line configuration, the meter supports a comprehensive set of Time of Use (TOU) configuration options including active season tables, weekly tables, daily tables and special days. This meter needs also supports prepayment TOU with STS currency token transfer. Up to 4 Time of Use rates are supported.

The meter needs to supports a wide range of configurable energy registers. Twelve total energy registers are available, with a further 24 energy registers which can be configured to store available values.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The meter further supports configurable demand registers with configurable integration period.

Various fraud detection log trigger items may be selected for the fraud log, such as terminal cover sensing, strong DC magnetic field detected, event log cleared and more.

A range of power quality features are also supported such as voltage supervision with configurable over and under voltage threshold limits and changeable parameters for long duration power failures and minimum power factor threshold. The also has a comprehensive list of power quality event log trigger sources that can be selected as desired, for example under and over voltage, current without voltage and power factor threshold exceeded.

Features supporting the meter’s load switch control include remote disconnection and reconnection and local (using the meter service tool). The meter also supports Demand Supervision functionality that disconnects the load switch in the event that the pre-set limiter threshold is exceeded. The Customer Interface Unit display offers seven arrow icons that are typically configured to show the current rate in use, the status of the meter terminal cover, the detection of a strong magnetic field and in the case of the SM the validity of the meter RTC, which is synchronised by the DC

2.1.8 Meter Status and Diagnostic Indicators

The meter includes a LED status indicator which allows a utility technician to view the operational status of the meter without the need to gain access to the consumer’s premises. In addition, LED indicators are available to show the status of the meter’s load switch and also PLC communications status

2.1.9 Anti-tamper Features

The meter is mechanically sealed for life against tampering and features various tamper detection options, including sensing the removal of the terminal cover with or without mains power present

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2.1.10 Technical Specification

General Overview	
Compatible network	
Single phase, 2-wire	
Enclosure format	
Rail mount, with locking clip compatible with 35mm DIN standard rail or flush mounting using keyhole slot and bottom fixing screws. Long and short terminal covers supported	
IEC Specific Data	
Rated voltage (U_n)	
Wide-range: 110 to 240 Volts AC	
Frequency	
50Hz or 60Hz	
Extended operating voltage range	
80% to 120% U_n	
Base current (I_b)	
5 Amps	
Maximum current (I_{max})	
80 Amps	
Short circuit current	
30 x I_{max} (≤ 10 ms according to IEC 62053-21) 2.5kA r.m.s. (Utilisation Category UC2 according to IEC 62055-31)	
Meter constant (LED flash rate)	
1000 impulses / kWh, 1000 impulses / kWh ¹	
Measurement Accuracy	
Active energy, according to IEC62052-11/62053-21 Class 1	
Reactive energy, according to IEC62053-23 Class 2 for $I_b = 10A$, Class 3 for $I_b = 5A$	
Measurement behaviour	
Starting current $\leq 0.004 I_b$ for Class 1	
General Data	
Operating Behaviour	
Power consumption in voltage circuit	
Active power at U_n (max)	<2W

Apparent power at U_n (max)	<12VA
Power consumption in current circuit	
Apparent power at I_b (max)	<7VA
Environmental Influences	
Area of application	
Indoor meter (according to IEC62052-11)	
Temperature range	
Operation meter	-10°C to +55°C
Storage	-40°C to +70°C
Relative humidity	
Maximum	$\leq 95\%$; Annual mean 75%
Degree of Protection (according to IEC60529)	
IP Rating	IP54
Product is for indoor use and must be installed in a suitable enclosure when used outdoors	
Electromagnetic Compatibility	
Electrostatic discharges (IEC61000-4-2)	
Air discharge	15 kV
Electromagnetic RF fields (IEC 61000-4-3)	
80 MHz to 2 GHz	10 V/m with load 30 V/m no load
Fast transient burst (IEC61000-4-4)	
Current / voltage under load (IEC 62053-21)	4 kV
Radio interference suppression (IEC / CISPR 22)	
Complies with requirements for CISPR 22 and CENELEC EN 50065-1	
Insulation Strength	
Insulation System Classification	
(According to IEC 62052-11)	Protective Class II
Insulation Level	
4 kV rms @ 50Hz for 1 minute	
Overvoltage withstand	
Overvoltage withstand	
440 Vac for 48 hours, 600 VDC for 1 minute	
Surge Immunity	
Voltage impulse withstand (Differential)	
Meets the requirements of IEC 62052-11	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Current impulse withstand	
According to:	IEC 62052-11, SANS 61643-1
With external arrester	
Withstand rating	30 kA, 8/20µs
Without external arrester	
Withstand rating	10 kA, 8/20µs
Calendar Clock	
Normal operation	
Accuracy (at +23°C)	± 0.2 s/day
Reserve running	
Accuracy (at +23°C)	<1 s/day
(EN 62054-21 requirement for time switches: 1.0s)	
Operational Reserve	
With super-capacitor	minimum 36 hours ²
<i>(RTC Synchronised by Data Concentrator)</i>	
Outputs	
Optical Test output (Active or reactive)	
Type	Visible Red LED
Meter constant ³	1000 pulses/kWh 1000 pulses/kVAh
Meter Faceplate Indications	
Meter Status Indication	
Type	Visible Yellow LED
Meter Load Switch Indication	
Type	Visible Red LED
PLC Status Indication	
Type	Visible Green LED
Phase Connections	
Format (4 terminal, NRS049 compliant)	
Type Bottom connect (Line, Neutral, Neutral, Load)	
Terminal Details	
Material	Mild steel, RoHS compliant passivation
Type	Single (M8) moving-cage terminal
Diameter	8.5 mm
Maximum conductor cross-section ⁴	25mm ²
Type of screw	slotted (flat screwdriver)

Communication Interfaces	
Optical Communications Port	
According to IEC 62056-21	
PLC Interface	
Type	OFDM G3-PLC
Narrowband Orthogonal Frequency Division Multiplexing (OFDM) for G3 networks in accordance with recommendation ITU-T G.9903 and CENELEC-A band plan	
Refer to- IEC61334-4-41, ISO/IEC13239/ EN 50065	
Range	Typically >200m
Load Switch	
Contact Data	
According to IEC 62055-31 for Utilisation Category UC2	
Meter Enclosure Material	
Material (Housing)	
Type:	Polycarbonate, flame-retardant
Resistance to spread of fire	
UL94-V0 rated @1.5mm. No toxic gases emitted: 'Green Material'	
Material (Terminal block)	
Type:	Polycarbonate, flame-retardant, glass-filled
Resistance to heat and fire	
Complies with 960°C glow-wire (IEC 60695-2-1)	
Weights & Dimensions	
Dimensions	
135.5mm(H) x 60mm(W) x 110mm(D) (Short cover)	
165.5mm(H) x 60mm(W) x 110mm(D) (Long cover)	
Please also refer to dimensional drawings	
Weight	
Including packaging (excl. MOV) approx.450 grams	
Including packaging (Incl. MOV) approx.455 grams	
Sealing	
Type	
Meter enclosure	Factory sealed for life
Terminal Cover	Utility sealing wires (1 point) Long and short cover
Specifications Compliance & Approvals	
IEC 62053-21, IEC 62053-23, IEC62055-41(STS) and IEC62055-51 (STS)	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2.1.11 PLC Customer Interface


General Data
Supply Voltage 110-240 VAC wide ranging power supply
Supply Frequency 50Hz or 60Hz
Power consumption (Burden) <1.5 W / <12 VA @ 230VAC, 50Hz
Maximum Rated Current <120mA @ 230VAC, 50Hz
Protective Class Double insulated – Protective Class 2
Supply Connection Mains supply by means of integrated power cord. Variants are available with various international power plugs
Battery 1 x 9 Volt (6LR61 type) battery
Communications Circuitry
Type Narrowband OFDM G3-PLC Power Line Carrier
Protocol Device Language Message Specification (DLMS)
Specification compliance IEC 61334-4-41, IEC 61334-5-2, and EN 50065-1
Operating Environment
Temperature Range Operating -10°C to +55°C Storage -40°C to +70°C
Relative Humidity (IEC 62052-11) Maximum ≤ 95%; Annual mean <75%
Enclosure
Type Wall mounted with integrated AC power cord and sliding battery compartment
Degree of Protection (IP Rating) IP 51
Material UV Stable Polycarbonate/ABS blend with flame-retardant, Resistance to heat and fire Complies with 960°C glow-wire (IEC 60695-2-1)


Resistance to spread of fire UL94-V0 rated @1.5mm. No toxic gases emitted: 'Green Material'
Dimensions 144mm(H) x 120mm(W) x 40.8mm(D)
Weight Including packaging ⁵ approximately 350 g
Sealing & Access Control
Battery Compartment Type Sliding compartment for battery replacement
Customer Interface Unit Enclosure Factory sealed- no user serviceable parts
Man-Machine Interface
Type Pictographic/Numeric LCD display, keypad, multi-colour rate of consumption indicator and alert LED's and audible feedback
Liquid Crystal Display (LCD) Size 9cm ² (50mm (W) x 26mm (H)) 8 digits in value field, 6 digits in the index field Digit size: 8mm (H) x 4mm (W)
Compliance / Certification SANS / IEC60950
Keypad 16-key, including 12-key standard layout including "Information" and "Backspace" keys as well as separate additional smart user keys
Buzzer Audible feedback on key press, token accept and reject melodies and alarms
Rate of Consumption Indicator (Rate LED) Multi-colour rate LED (colour indicates current credit level). Not for accuracy verification
Alarm Indicator Multi-colour LED indications for ease of use and additional audible warning of critically low credit status or other operational warnings


2.2 Three Phase Base mounted SMART Split meter:

2.2.1 Introduction


The three phase meter needs to be smart pre and post payment meters and is an advanced three-phase, multi-function, keypad-based, smart prepayment meter. The solution incorporates powerful e-metering functionality combined with STS prepayment and uses open standard OFDM G3-PLC communications between the meter, the customer interface unit and a PLC Data Concentrator. Series 2 includes RS485 port to support an under-cover modem for point-to-point communications option.



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

The solution is one of the world’s first truly open standard smart STS pre- and post-payment meters, making use of OFDM G3-PLC, dlms/COSEM and STS prepayment standards to ensure future proof open communications standards for the electricity utility for years to come

2.2.2 Overview


The three-phase split pre and post- payment meter needs to be based on existing and already proven 3ph S1 meter, but with the additional of an RS485 port for point-to-point applications with an external or internal (under cover) modem. The 3ph split meter may be able to be utilised in an offline mode as a stand-alone split prepayment meter, or in an on-line mode as part of an end-to-end two-way AMI smart metering solution, using either G3- PLC communications via a Data Concentrator or point-to-point using the modem and RS485 port.


2.2.3 Features


The meter which needs to work with a PLC Customer Interface Unit.


- Integrated OFDM G3-PLC transceiver for two-way communications between the meter, the Customer Interface Unit and the DC450 Data Concentrator.
- Local communications using RS485 port with external or under cover modem for point-to point communications.
- Data Concentrator communications via WAN to the Head-end System (HES).
- Open standards for interoperability
- Open STS prepayment (IEC62055-41/51)
 - dlms/COSEM
- Open International standard for PLC communications - OFDM G3-PLC
- Terminal format - 3 phase asymmetrical layout
- Long and short terminal cover options
- Event trigger and fraud logs with date and time stamps in the on-line mode
- Voltage supervision threshold settings with events logged when thresholds are exceeded
- Remote disconnect and reconnect in the on-line mode.
 - Extensive e-metering load switch control functions including fuse supervision
 - Four quadrant measurement with separate import and export registers
- Changeable meter account modes by means of dlms special commands for Smart Meters (SM)
 - Modes supported: kWh transfer STS Prepayment, Smart Prepayment TOU with STS Currency token transfer TOU and Post-payment (E460S type)
 - Emergency credit
 - Real Time Clock – synchronised by the Data Concentrator in the on-line configuration mode
 - Time of Use, with STS currency token transfer option in the prepayment mode



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

- Meter has local LCD display
- The CIU has a LCD display with 8 digits for register values, an index field, prepayment credit wedge, battery indicator for the P160, currency or kWh indicator, phase and energy direction, alarm and configurable arrow indicators and load switch status
- Various options on the Customer Interface Unit for scrolling operating display list or standard display list that may be stepped through with a scroll keypress on the CIU.

2.2.4 Split meter functionality

The split metering solution consists of two parts, the meter and the customer interface unit.

Communication between the meter and the customer interface unit is by means of G3-PLC Power Line Carrier, using existing household wiring; no additional communication wires are required.

The Customer Interface Unit is compact with a user-friendly keypad and display. It may be installed in any convenient location in the consumer’s home where there is an electrical socket outlet. An easily replaceable battery is provided for communicating in the absence of AC mains power e.g., when the meter is out of credit.

The meter contains all critical metering, token decryption, load control and smart meter functionality. It operates independently and is immune to any form of tampering on the Customer Interface Unit. The 3ph meter is typically installed in a secure street kiosk. When used in conjunction with the G3-PLC Data Concentrator or with a modem connected to the RS485 port, the meter can operate in an on-line mode.

2.2.5 Customer Interface Unit (CIU)

The CIU is plugged into an existing mains outlet in the household. Under normal conditions when the load switch of the meter is closed and there is power in the house, the Customer Interface Unit operates directly from mains voltage. However, if the meter load switch opens (e.g., could be due to prepayment credit expiring), the Customer Interface Unit, which is fitted with a battery, will enter a sleep mode to save battery energy. By pressing and holding the “Enter/Power key” on the keypad, the customer can power up the Customer Interface Unit using the battery and enable a new prepayment credit token to be entered. If there is no power in the household and the customer interface unit is woken up using the battery, the display will flash on and off, showing the user the last known status of the meter, for example prepayment credit expired.

The customer or field technician can additionally view meter parameters by accessing specific register information via the Customer Interface Unit keypad or by scrolling through the available pre-configured registers, by pressing the scroll up and down buttons on the keypad.

2.2.6 Advance Metering Interface (AMI)

The solution needs to be capable of “upstream” PLC communication to a Data Concentrator typically installed at a street kiosk, low-voltage distribution transformer or mini sub-station and “downstream” PLC communications to the Customer Interface Unit. Additionally, the use of an external or under cover modem connected to the RS485 port enables point to point connection to the AMI system.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

When the meter forms parts of an end-to-end Advanced Metering Infrastructure (AMI) system and powerful e-metering and prepayment capability can be supported. When the 3ph meter forms part of the AMI infrastructure, it supports extensive and powerful e-metering functionality, such as:

- two-way communications
- real time clock synchronised by the system
- remote change of account modes (post-payment or prepayment with the Smart meter (SM))
- standard kWh STS token transfer or smart prepayment with currency TOU STS prepayment token
- remote disconnect and reconnect
- Events and fraud notifications

2.2.7 Smart e-meter function

The meter can be configured both locally via the IEC 62056-21 optical interface using meter configuration suite of software, and remotely via the Head-end System when in the on-line mode. The meter's Real time clock (RTC) is adjustable locally via the optical interface using the ACD meter management tool or remotely synchronised by the Head-end System.

The meter supports a comprehensive set of Time of Use (TOU) configuration options including active season tables, weekly tables, daily tables and special days. This smart mode supports prepayment TOU with STS currency token transfer. Four (4) Time of Use rates are the default available for configuration.

The meter supports a wide range of configurable energy registers. Twelve total energy registers are available, with a further 24 energy registers which can be configured to store available values.

The meter further supports configurable demand registers with a selection of integration periods.

Various fraud detection log trigger items may be selected for the fraud log, such as terminal cover sensing, strong DC magnetic field detected, measurement software changed, event log cleared and more.

A range of quality of supply features are also supported such as voltage supervision with configurable over and under voltage threshold limits and changeable parameters for long duration power failures and minimum power factor threshold. The 3ph meter needs also has a comprehensive list of power quality event log trigger sources that can be selected as desired, for example under and over voltage, current without voltage and power factor threshold exceeded.

Features supporting the meter's load switch control include remote or local (using ACD meter tool) meter load switch disconnection or reconnection and disconnect when fuse supervision monitor thresholds exceeded.

The Customer Interface Unit display offers seven arrow icons which are individually configurable to indicate by selectable control sources. There are further options to display the arrow icons as steady state or blinking. In addition, a configurable operating display list that can cycle on the CIU display, or a standard display list that may be stepped through by pressing the scroll keys on the keypad

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2.2.8 Meter Status and Diagnostic Indicators

The meter has a local LCD display with 8 digits for register values, 6-digit index field, phase and energy direction, alarm, configurable arrow indicators and load switch status. The meter also includes a dual colour LED status indicator which allows a utility technician to view the operational status of the meter without the need to gain access to the consumer’s premises and to view the PLC communication status.

2.2.9 Anti-tamper Features

The meter is sealed against tampering and features various tamper detection methods, including removal of the terminal and main meter cover.

Contractor

Witness 1

Witness 2

Employer


Witness 1


Witness 2


2.2.10. Technical Specification

General Overview	
Compatible network	Three phase, four-wire
Enclosure format	Three phase, asymmetrical terminal format. Short terminal standard, long cover optional
IEC Specific Data	
Rated voltage (U_n)	Wide range: 3 X 120 to 240 Volts AC
Frequency	50Hz or 60Hz
Extended operating voltage range	Voltage (for $U_n = 230V$), 50% to 120% U_n i.e.>115V Voltage (for $U_n = 120V$), 80% to 120% U_n i.e.>90V
Base current (I_b)	5 Amps
Maximum current (I_{max})	80 Amps per phase
Short circuit current	30 x I_{max} (≤ 10 ms according to IEC 62053-21) 3kA r.m.s. (Utilisation Category UC3 according to IEC 62055-31)
Meter constant (LED flash rate)	1000 impulses / kWh 1000 impulses / kVAh ¹
Measurement Accuracy	Active energy, according to IEC62052-11/62053-21 Class 1
	Reactive energy, according to IEC62053-23 Class 3 for $I_b = 5A$
Measurement behaviour	
Starting current (Active)	$\leq 0.004 I_b$ for Class 1
Starting current (Reactive)	$<0.005 I_b$ for Class 2


General Data	
Operating Behaviour	
Power consumption in voltage circuit (with all three phases powered up)	
Active power at U_n 120V	<1.2W
Active power at U_n 230V	<1.6W
Apparent power at U_n 120V, 50Hz	<4VA / phase
Apparent power at U_n 230V, 50Hz	<12.5VA / phase
Environmental Influences	
Area of application	Indoor meter (according to IEC62052-11)
Temperature range	
Operation meter	-10°C to +55°C
Storage	-40°C to +70°C
Relative humidity	
Maximum	$\leq 95\%$; Annual mean 75%
Degree of Protection (according to IEC60529)	
IP Rating	IP54 ²
Product is for indoor use and must be installed in a suitable enclosure when used outdoors.	
Electromagnetic Compatibility	
Electrostatic discharges (IEC61000-4-2)	
Air discharge	15 kV
Electromagnetic RF fields (IEC 61000-4-3)	
80 MHz to 2 GHz	10 V/m with load 30 V/m no load
Fast transient burst (IEC61000-4-4)	
Current / voltage under load (IEC 62053-21)	4 kV
Radio interference suppression (IEC / CISPR 22)	
Complies with requirements for CISPR 22 and CENELEC EN 50065-1	
Insulation Strength	
Insulation System Classification	
(According to IEC 62052-11) Protective Class II	



 Contractor


 Witness 1


 Witness 2


 Employer


 Witness 1


 Witness 2

Insulation Level
 4 kV rms @ 50Hz for 1 minute

Overvoltage withstand

Overvoltage withstand
 440 Vac for 48 hours, 600 VDC for 1 minute

Surge Immunity

Voltage impulse withstand (Differential)
 Meets the requirements of IEC 62052-11

Current impulse withstand
 According to: IEC 62052-11, SANS 61643-1

With external arrester
 Withstand rating 30 kA, 8/20µs

Without external arrester
 Withstand rating 10 kA, 8/20µs

Calendar Clock

Normal operation
 Accuracy (at +23°C) ± 0.2 s/day

Reserve running
 Accuracy (at +23°C) <1 s/day
 (EN 62054-21 requirement for time switches: 1.0s)

Operational Reserve
 With super-capacitor minimum 36 hours³
 (RTC Synchronised by Data Concentrator)

Rate of Use Output

Optical Test output (Active or reactive)
 Type Visible Red LED
 Meter constant⁴ 1000 pulses/kWh
 1000 pulses/kVAh

Meter Faceplate Indications

Meter Status Indication
 Type [Dual colour] Visible Yellow LED

PLC Status Indication
 Type [Dual colour] Visible Green LED

Meter Load Switch Indication
 Type LCD Icon

Phase Connections

Format
 Type Asymmetrical, 8 terminals

Terminal Details
 Material of terminal Brass
 Type Terminal with two screws
 Diameter 9.5 mm
 Minimum conductor cross-section 4.0 mm²
 Maximum conductor cross-section 35.0 mm²

For wires with small conductor cross-sections (≤ 6 mm²), the connecting line must be placed carefully in the middle of the terminal, so that it cannot move sideways when tightening the terminal screws. When tightening, ensure that the connecting line remains between the copper inside the terminal and the screw. Stranded wires must be fitted with ferrules.


- Type of screw:
 - Steel zinc-plated Pozidrive combi screws (default)
- Screw dimensions M6 x 14
- Maximum screw head diameter ≤ 6.6 mm
- Cross-slot type Z, size 2 (ISO4757-1983)
- Slot width 0.8 mm
- Slot length min. 6 mm


Communication Interfaces


Optical Communications Port
 According to IEC 62056-21


G3-PLC Interface
 Frequency band CENELEC A
 OFDM G3-PLC with COSEM/DLMS communication protocol according to EN50065-1 supporting the following OSI Layers:


- ITU-T G.9903 physical layer for modulation, adaptive tone mapping and notching
- MAC layer IEEE 802.15.4; time domain and collision management; CSMA/ARQ
- 6LoWPAN adaptation sub layer Plug and Play network management to choose "Best Path" (Full Mesh Support)
- IPv6 IETF RFC4291/4862 addressing and networking
- DLMS application layer 62056-53



 Contractor


 Witness 1


 Witness 2


 Employer


 Witness 1


 Witness 2

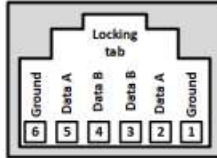
- COSEM application model: 62056-61 (OBIS) and 62056-62 (interface classes)

Range: Typically >200m with G3-PLC repeater functionality

RS485 Communications Port

Type: RJ11, RS485 bidirectional, asynchronous interface, galvanically isolated (Protective class II)

Up to 32 meters can be connected to one line and then connected to an external modem to perform readouts and parameterising.



Load Switch

Contact Data

According to IEC 62055-31 for Utilisation Category UC3

Inputs and Outputs

Pulse Input

Type S0
 Terminals 30 (+) and 31 (-)
 According to IEC 62053-31 class A
 Configurable as pulse counter or alarm input

Output

Terminals 23 and 24
 Type solid-state auxiliary load switch
 Nominal voltage 230 VAC/DC
 Maximum voltage 250 VAC/DC

Maximum switching current 90 mA

Meter Enclosure Material

Material (Housing)

Type: Polycarbonate, flame-retardant
 Resistance to spread of fire
 UL94-V0 rated @1.5mm. No toxic gases emitted:
 'Green Material'

Material (Terminal block)

Type: Polycarbonate, flame-retardant, glass-filled

Resistance to heat and fire - Complies with 960°C glow-wire (IEC 60695-2-1)

Weights & Dimensions

Dimensions⁵

Width/Height/Depth 172.0 / 198.8 / 76.6 mm

Please also refer to dimensional drawings

Weight

Including packaging approx. 1.5kg

Sealing

Type

Meter enclosure Factory sealed
 Terminal Cover Utility sealing wires (2 points)
 Long and short (default) covers

Specifications Compliance & Approvals

IEC62055-41 (STS), IEC62055-31, IEC62052-31, SANS1524-1, DLMS, G3-PLC

Contractor

Witness 1

Witness 2

Employer

Witness 1


Witness 2


2.2.11 PLC Customer Interface


General Data	
Supply Voltage	110-240 VAC wide ranging power supply
Supply Frequency	50Hz or 60Hz
Power consumption (Burden)	<1.5 W / <12 VA @ 230VAC, 50Hz
Maximum Rated Current	<120mA @ 230VAC, 50Hz
Communications Circuitry	
Type	Narrowband OFDM G3-PLC Power Line Carrier
Protocol	Device Language Message Specification (DLMS)
Specification compliance	IEC 61334-4-11, IEC 61334-5-2, and EN 50065-1
Operating Environment	
Temperature Range	
Operating	-10°C to +55°C
Storage	-40°C to +70°C
Relative Humidity (IEC 62052-11)	Maximum ≤ 95%; Annual mean <75%
Enclosure	
Type	Wall mounted with integrated AC power cord and sliding battery compartment
Degree of Protection (IP Rating)	IP 51
Material	UV Stable Polycarbonate/ABS blend with flame-retardant, Resistance to heat and fire Complies with 960°C glow-wire (IEC 60695-2-1)
Resistance to spread of fire	UL94-V0 rated @1.5mm. No toxic gases emitted: 'Green Material'
Dimensions	144mm(H) x 120mm(W) x 40.8mm(D)
Weight	


Protective Class	Double insulated – Protective Class 2
Supply Connection	Mains supply by means of integrated power cord. Variants are available with various international power plugs
Battery	1 x 9 Volt (6LR61 type) battery
Including packaging ⁶	approximately 350 g
Sealing & Access Control	
Battery Compartment	Type Sliding compartment for battery replacement
Customer Interface Unit Enclosure	Factory sealed- no user serviceable parts
Man-Machine Interface	
Type	Pictographic/Numeric LCD display, keypad, multi-colour rate of consumption indicator and alert LED's and audible feedback
Liquid Crystal Display (LCD)	
Size	9cm ² (50mm (W) x 26mm (H)) 8 digits in value field Digit size: 8mm (H) x 4mm (W)
Compliance / Certification	Conforms to SANS / IEC60950
Keypad	16-key, including 12-key standard layout including "Information" and "Backspace" keys as well as separate additional smart user keys
Buzzer	Audible feedback on key press, token accept and reject melodies and alarms
Rate of Consumption Indicator (Rate LED)	Multi-colour rate LED (colour indicates current credit level). Not for accuracy verification
Alarm Indicator	Multi-colour LED indications for ease of use and additional audible warning of critically low credit status or other operational warnings



Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

2.3 Data Concentrator (DC)

2.3.1 Overview

DC handles the communication between the Head End System (HES) and the G3-PLC metering device. It reads metering data automatically and can send data directly to the system or store it for later retrieval by HES. DC communicates with the metering device using PLC communication (G3-PLC OFDM protocol in the CENELEC A or G3-500 band).

It transfers messages to and from the Head End System using the standard TCP/IP communication protocol over an Ethernet connection or with its pluggable 2G/3G modem

2.3.2 Technical Data

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Power supply

- Operating voltage: 1 x 230 V or 3 x 230/400 V
- Earthing systems (IEC 60364): TN and TT
- Voltage range: 0.8 U_n to 1.15 U_n
- Frequency 50 Hz
- Power consumption while charging the supercapacitor: 11.6 W / 38 VA
- Power consumption in normal operation:
 - Without communication: 3.1 W / 29 VA
 - With communication over LAN: 3.8 W / 29.3 VA
 - With communication over GPRS: 5.8 W / 31.3 VA
- Back-up time (supercapacitor) when fully charged: 7 days

External connections

- RS-485, Safety Extra-Low Voltage (SELV), max. 24 V
- 2 x LAN (RJ45) interfaces (10/100 Base-T)
 - LAN1 to connect to the Head End System
 - LAN2 for local web-interface access
 - Safety Extra-Low Voltage (SELV)

2G/3G modem characteristics

- Dual-band UMTS: 900/2100 MHz
- Dual-band GSM: 900/1800 MHz
- UMTS 3GPP release 5
- GSM release 99/release 4
- EDGE (E-GPRS) multi-slot class 10
- GPRS multi-slot class 10
- SIM card interface 1.8 V and 3 V
- SMA connector for the antenna

Approved antennas*

- 2G/3G Antenna no. P000217710 (SMA male antenna): Taoglas ref. TG.22.0111
- Flat Antenna GSM 900/1800 no. 74 507 0097 0 (SMA male connector, cable 3 m): ANTENNENSYSME – 700 449 402, SMA(m), 3.0 m
- Flat Antenna GSM 900/1800 no. 74 507 0098 0 (SMA male connector, cable 10 m): ANTENNENSYSME – 700 449 404, SMA(m), 10.0 m

*The use of any other antenna is prohibited.

G3-PLC interface

- 3-phase PLC signal injection
- PLC communication in the CENELEC A or G3-500 band
- G3-PLC as per ITU.T G.9903 (02-2014)
- Incorporates 6LoWPAN adaptation layer to transmit IPv6 packets over power line channels
- IEEE 802.15.4-based MAC layers enable interoperability
- Plug-and-play installation

Electromagnetic compatibility and safety

- EMC according to EN 50065-1 & EN 50065-2-3
- Electric strength: 6.15 kV, 50 Hz (EN 60950-1)
- Electrostatic discharge: ±8 kV contact, ±8 kV air discharge (EN 50065-2-3)
- Surge: ±4kV, 1.2/50 µs (EN 50065-2-3)
- Burst: 4 kV (IEC 61000-4-4)
- Impulse voltage: ±6 kV, 1.2/50 µs (IEC 60950-1)
- Radio frequency electromagnetic field 10 V/m (EN 50065-2-3)
- Safety according to EN 60950-1
- Protection class to IEC 60050-131: class 2
- Overvoltage category IV (6000 V)

Environmental influences

- Temperature range
 - Operation –25 to +70 °C
 - Storage –40 to +85 °C
 - Other temperatures possible with external housing and warming/cooling
- Protection class to IEC 60529: IP 51
- Max. operating altitude 2000 m
- Humidity range (operation and storage) 0-90%
- Pollution degree 2

Case

- Material: Polycarbonate (10% glass fibre filler)
- Installation: On wall, DIN rail or equivalent
- Flammability class: UL94 5VB
- RoHS II compliant

Dimensions

- Height 184 mm
- Width 175 mm
- Depth 72 mm (without sealing)

2.4 System Functionality Requirements

2.4.1 Overview:

The system shall comply with the following use cases, as a minimum, as per NRS049:2016 Ed2 and associated amendments:

2.4.1.1 Record Meter Event

2.4.1.2 Report Meter Event

2.4.1.3 Operate In Prepayment Mode



Contractor




Witness 1




Witness 2



Employer



Witness 1



Witness 2

- 2.4.1.4 Configure Account Remote
- 2.4.1.5 Change Accounting Mode Remote
- 2.4.1.6 Config Tariff Remote
- 2.4.1.7 Charge Flat Tariff Rate Local
- 2.4.1.8 Charge Block Tariff Rate Local
- 2.4.1.9 Charge Time Of Use Tariff Rate Local
- 2.4.1.10 Charge Maximum Demand Rate Local
- 2.4.1.11 Enter Token Credit Local
- 2.4.1.12 Enter Token Credit Remote
- 2.4.1.13 Credit Export Energy Local
- 2.4.1.14 Record Metering Parameters Local
- 2.4.1.15 Read Meter On Schedule Remote
- 2.4.1.16 Read Meter On Demand Remote
- 2.4.1.17 Read Meter On Demand Local
- 2.4.1.18 Read Meter On Demand Local
- 2.4.1.19 Read Load Control Status Remote
- 2.4.1.20 Read Load Control Status Local
- 2.4.1.21 Disconnect Supply Remote
- 2.4.1.22 Reconnect Supply Remote
- 2.4.1.23 Disconnect Supply Local
- 2.4.1.24 Reconnect Supply Local
- 2.4.1.25 Reduce Demand By Power Limit Remote Control

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2.5 System Specific and Operational Requirements

The following specific and operational requirements shall be included in order for the municipality to effectively operate the system:

2.5.1 System parameterization and configuration tools for the meters and communication modules to ensure that the setup and installation and linking of meters is seamless and user-friendly

2.5.2 The system shall interface and communicate with a third party electricity vending system and comply with the prepayment use case

2.5.3 To ensure revenue protection and integrity the system shall have the capability to do energy balancing at the concentrator and meter levels so that it guards against fraudulent activities, e.g. ghost vending

2.5.4 The deployment of the system may not necessarily include an ERPS during the initial implementation which means some of the functions of the ERPS shall be cloned and executed by the HES to meet some of the use-cases stated above, as enterprise level system may be implemented at a later stage

2.5.5 The system shall be deployed on the municipal IT network with a fully fledged control room on the municipal premises.

2.5.6 All meters will be installed in accordance with the SANS 10142 regulations and the installer will provide an installation certificate of each metering installation on the format that will be determined by the MLM.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Section C3.2 Engineering

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.2 ENGINEERING

C3.2.1 STANDARDS AND CODES OF PRACTICE

The following design standards for civil engineering infrastructure will apply:

- i) SANS 1200
- ii) Guidelines for the provision of engineering services and amenities in residential township development by the National Housing Board (Red Book)
- iii) *General Conditions of Contract for Construction Works* (2015) (Third Edition) by the South African Institution of Civil Engineers.

C3.2.2 DESIGN AND SPECIFICATIONS

- (a) The Employer is responsible for the design of the permanent Works as reflected in the Contract Documents unless otherwise stated.
- (b) The Contractor is responsible for the temporary Works and their 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.
- (d) Where the Contractor is to supply the design of designated parts of the permanent Works or temporary Works he shall supply full working drawings supported by a professional engineer's design certificate.

C3.2.3 LIST OF DRAWINGS

Drawings

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and dimensions shall not be scaled from the Drawings, unless required by the Engineer. The Engineer will, on the request of the Contractor in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

The Contractor shall ensure that accurate as-built records are kept of all infrastructure installed or relocated during the Contract. The position of pipe bends, junction boxes, duct ends and all other underground infrastructure shall be given by either co-ordinates, or stake value and offset. Where necessary, levels shall be given. A marked-up set of drawings shall also be kept and updated by the Contractor. This information shall be supplied to the Engineer's Representative on a regular basis.

All information in possession of the Contractor, required by the Engineer and/or the Engineer's Representative to complete the as-built/ record drawings, must be submitted to the Engineer's Representative before a Certificate of Completion will be issued.

The Drawings prepared by the Employer for tender purposed are listed and bound at the back of this volume. The Employer reserves the right to issue amended and/or additional drawings during the Contract.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT : RFP/01/2023-24

Section C3.3 Procurement

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.3 PROCUREMENT

C3.3.1 Procurement Principles

The Employer decided to adopt the Standard of Uniformity in Construction Procurement published by the Construction Industry Development Board (CIDB) for his procurement process.

The Standard for Uniformity in Construction Procurement establishes minimum requirements that:

- promote cost efficiencies through the adoption of a uniform structure for procurement documents, standard component documents and generic solicitation procedures;
- provide transparent, fair and equitable procurement methods and procedures in critical areas in the solicitation process;
- ensure that the forms of contract that are used are fair and equitable for all the parties to a contract; and
- enable risk, responsibilities and obligations to be clearly identified.

C3.3.2 Preference Point Scoring System

The Preference Points Scoring system will be applied as indicated in Part T1.2, 3.11.3 Method 4.

C3.3.3 Subcontractors

The contractor shall subcontract targeted enterprises directly in the performance of the contract to the extent that the total financial value of such subcontracts, in accordance with all the requirements of this document, is sufficient to achieve the contract participation goal provided for in the contract.

The contractor will be required to subcontract the any specialised works to a specialist Subcontractor, familiar with the type of work.

C3.3.4 Participation of Targeted Enterprises

3.3.4.1 Introduction

This document provides for the setting of participation targets (contract participation goal) for a contract and the measurement of key participation indicators to be used in the audit of compliance with set contract participation goals during the execution of the contract. The Matjhabeng Local Municipality has determined the minimum Contact Participation Goal

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(CPG) for this contract to be **30%**.

3.3.4.2 Requirements

- a) The contractor shall subcontract targeted enterprises directly in the performance of the contract to the extent that the total financial value of such subcontracts, in accordance with all the requirements of this document, is sufficient to achieve the contract participation goal provided for in the contract.
- b) The contractor must submit to the principal agent / engineer details of his plan to achieve the minimum contract participation goal in the Contract Participation Goal Implementation Plan (see **Annexure A**), within five working days of being instructed to do so. If no such instructions are given, these plans must be submitted to the principal agent / engineer before or with the submission of the first claim for payment.
- c) The contractor must enter into written contractual agreements with all the targeted enterprises cited in the Contract Participation Goal Implementation Plan and shall, as soon as is practicable, but not later than the commencement of such subcontracted works and/or services, furnish the principal agent/engineer with copies of such agreements and the written acceptances thereof.
- d) Such written contractual agreements **must not contain** any of the following:
 - i) a right to set off in favour of the employing contractor not provided for by law;
 - ii) arbitrary decision making powers in favour of the employing contractor or his agent, with no recourse to independent adjudication in the event of a dispute arising;
 - iii) payment procedures based on a pay-when-paid system;
 - iv) retention percentages and periods of retention after completion, which are greater than percentages and periods provided for in the contract; or
 - v) conditions which are more onerous than those which exist in the contract.
- e) The subcontracts to be performed by the targeted enterprises shall thereafter neither be reduced in scope, nor terminated without prior written notification to the employer.
- f) **Verification of the status of targeted enterprises:** The contractor must submit to the principal agent / engineer completed Targeted Enterprise Declaration Affidavits (see **Annexure B**), together, where required, with Letters of

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Undertaking to act as Subcontractors (see **Annexure C**), in respect of each and every targeted enterprise whose contribution shall be counted towards the tendered contract participation goal. These documents must be submitted before or with the submission of the first claim for payment, or as otherwise agreed in writing with the employer.

NOTE: The information contained in the Contract Participation Goal Implementation Plan facilitates the monitoring of the performance of the contractor in terms of his contract participation goal obligations.

3.3.4.3 Substitutions

- a) In the event that a contracted targeted enterprise is found:
 - i) to be unable to perform, or to perform on time;
 - ii) to be unable to produce acceptable work;
 - iii) to be unwilling to perform work required;
 - iv) not to be fit to perform the services; or
 - v) not to be creditable towards contract participation goals;

the contractor shall notify the employer in writing of the apparent necessity to reduce or terminate such a targeted enterprise's subcontract, citing the reasons therefore, as well as new measures to be implemented by the contractor to achieve the tendered contract participation goal.

- b) In such event, the contractor shall either provide a substitute targeted enterprise to take over the works and/or services of such subcontract, or subcontract a targeted enterprise on another aspect of the contract, so as to achieve the tendered contract participation goal. The contractor shall, in such circumstances, submit to the employer a Targeted Enterprise Declaration Affidavit in respect of the proposed substitute or subcontracted other targeted enterprise, and supply details of the nature and value of the subcontract which shall be performed by such targeted enterprise.
- c) Provided that the events referred to in 3.3.4.2(b) (i) to (v) resulted due to no fault of the contractor, the employer may, at his sole discretion and upon the basis of evidence submitted by the contractor in support of fruitless efforts in good faith to secure substitute or other targeted enterprise participation, grant a waiver in respect of contract participation goal obligations.

3.3.4.4 *Bona fides* of targeted enterprises

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Where an enterprise under contract was initially considered to be a targeted enterprise but is later discovered not to be so, or is found not to be creditable towards contract participation goals, the employer may consider a partial waiver of the contractor's obligations towards the achievement of the contract participation goal in respect of such an enterprise, should the contractor satisfactorily demonstrate that he was justified in believing the enterprise to be a targeted enterprise.

3.3.4.5 Records

- a) The contractor shall submit all the documentation required in terms of 4.3.4.2(b), 4.3.4.2(c) 4.3.4.2(f) and 4.3.4.3(b) timeously as well as a schedule clearly indicating the commencement and completion dates of works and/or services to be performed by all the contracted targeted enterprises, for the purpose of securing credits towards the tendered contract participation goal. This schedule shall be submitted together with his programme which is required in terms of the relevant conditions of contract and shall be updated by the contractor whenever a change in date occurs.
- b) The contractor shall prepare and attach to his claim for payment, in a form approved by the employer, the following:
 - i) a brief report which describes the commercially useful functions performed by the targeted enterprises in the performance of the contract, both over the interim period and on a cumulative basis; and
 - ii) a schedule reflecting the total value of the subcontracts, the cumulative value of the subcontracts and the value of works and/or services performed over the period for which payment is claimed in respect of each and every targeted enterprise.
- c) Should random inspections conducted by the principal agent / engineer on targeted enterprise activities indicate that such enterprises are not performing in accordance with the requirements of this document, the contractor shall provide, in addition to the requirements of 4.3.4.5(b), separate weekly resource returns and any other relevant information in respect of such targeted enterprises in a format approved by the principal agent / engineer.
- d) The principal agent / engineer shall certify the value of work completed towards the tendered contract participation goal whenever a claim for payment is issued and shall notify the contractor of this amount.
- e) The contractor shall, upon completion of each individual targeted enterprise's subcontract, issue a completion certificate and certify the amount paid to such

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

targeted enterprises. The contractor shall submit the certificates, counter-certified by the relevant targeted enterprises, to the principal agent / engineer for record-keeping purposes and for purposes of verifying compliance with the tendered contract participation goal.

- f) The contractor's claims for payment may be rejected as being incomplete should all appropriate supporting documentation described in 4.3.4.5(b), 4.3.4.5(c), and 4.3.4.5(e) not be provided.
- g) The contractor's final claim for payment may be considered only after the certificates described in 4.3.4.5(e) are received.

3.3.4.6 Penalties

- a) In the event that the contractor fails to substantiate that any failure to achieve the tendered contract participation goal was due to quantitative underruns, the elimination of items contracted to targeted enterprises, or any other reason beyond the contractor's control which may be acceptable to the employer, the penalties provided for in 3.3.4.6(a) (i) below shall apply:
 - i) The contractor shall be liable to the employer for the payment of a penalty amount equal to 0.05% of the financial value of contracts not awarded to targeted enterprises required to have achieved the minimum contract participation goal.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Annexure A

Contract Participation Goal Implementation Plan

Employer	
Project description	
Tender number	
Project reference number	

A.1. Contract parameters

Contract participation goal applicable to the contract		%
Contract sum at time of award (exclusive of value added tax)	R	
Less: preliminaries	R	
Less: contingencies and escalation	R	
Net amount	R	(1)

A.2. Achieving the contract participation goal

I/We commit to achieve the contract participation goal (CPG) by subcontracting to targeted enterprises.

A.3. Documentation

In support of my/our contract participation goal requirements, I/we submit the following documents:

(List all documents accompanying this form viz: Targeted Enterprise Declaration Affidavits; Letters of Undertaking to perform as Subcontractors) *

* Contractors are responsible for the reproduction of sufficient number of copies of these forms for the purpose of this contract.

A.3.1.

.....

A.3.2.

.....

A.3.3.

.....

A.3.4.

.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

A.4. Contracting of targeted enterprises as subcontractors

Note: The financial value of the participation aimed towards the contract participation goal shall exclude preliminaries, contingencies, escalation and value added tax

I/we certify that I/we will be contracting the following targeted enterprises as subcontractors:

A.4.1

Name of targeted enterprise	
Address	
Contact Person	
Telephone	
Fax	
Service/work to be performed	
Company/enterprise income tax reference number	
CIDB Registration Number	
CIDB Contractor Grading Designation	
Financial value of participation claimed towards contract participation goal	R
Percentage participation claimed towards contract participation goal	%

A.4.2

Name of targeted enterprise	
Address	
Contact Person	
Telephone	
Fax	
Service/work to be performed	
Company/enterprise income tax reference number	
CIDB Registration Number	
CIDB Contractor Grading Designation	
Financial value of participation claimed towards contract participation goal	R
Percentage participation claimed towards contract participation goal	%

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

A.4.3

Name of targeted enterprise	
Address	
Contact Person	
Telephone	
Fax	
Service/work to be performed	
Company/enterprise income tax reference number	
CIDB Registration Number	
CIDB Contractor Grading Designation	
Financial value of participation claimed towards contract participation goal	R
Percentage participation claimed towards contract participation goal	%

A.4.4

Name of targeted enterprise	
Address	
Contact Person	
Telephone	
Fax	
Service/work to be performed	
Company/enterprise income tax reference number	
CIDB Registration Number	
CIDB Contractor Grading Designation	
Financial value of participation claimed towards contract participation goal	R
Percentage participation claimed towards contract participation goal	%

(Continue as required for other targeted enterprises)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

A.5. Summary of targeted enterprise participation

Name of contracted targeted enterprise	Financial value of subcontracts	Percentage participation claimed towards contract participation goal
	R	%
	R	%
	R	%
	R	%
	R	%
	R	%
	R	%
	R	%
	R	%
	R	%
Total contribution towards CPG	R	% (2)

Targeted Contract Participation Goal:

$Ng = (2)/(1) \times 100 = R...../R..... \times 100 =%$

3

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

A.6. Undertaking

I/We hereby certify to the best of my/our knowledge that the above information, facts and representations are correct and that the proposed targeted enterprises named are able to perform commercially useful functions in the performance of the contract and are *bona fide* targeted enterprises.

SIGNED FOR THE CONTRACTOR:

--	--	--

Name of contractor

Signature

Date

WITNESSED BY:

--	--	--

Name of witness

Signature

Date

--

Contractor

--

Witness 1

--

Witness 2

--

Employer

--

Witness 1

--

Witness 2

Annexure B

Targeted Enterprise Declaration Affidavit

Employer	
Project description	
Tender number	
Project reference number	

B.1. Name of targeted enterprise

B.2. Legal Entity

Company or Close Corporation:	OR	Natural Person or Partnership:
Registration number:		Identity Number(s) is/are:
Income Tax Reference Number:		Income Tax Reference Number(s) is/are:

B.3. And who is:

Represented herein, and who is duly authorized to do so, by: Mr/Mrs/Ms: In his/her capacity as:	Note: A Resolution / Power of Attorney, signed by all the Directors / Members / Partners of the Legal Entity <u>must</u> accompany this Affidavit, authorizing the representative to make this affidavit.
---	--

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

B.4. Principal business activities

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B.5. *Domicilium citandi et executandi*

The targeted enterprise elects as its <i>domicilium citandi et executandi</i> in the Republic of South Africa, where any and all legal notices may be served, as (physical address):

B.6. Other contact details of the targeted enterprise are:

Telephone No:	
Cellular Phone No:	
Fax No:	
Postal address:	
Bank:	
Branch:	
Account number:	
CIDB Registration Number:	
CIDB Contractor Grading	

B.7. List a minimum of three (3) contracts which you are presently engaged in and have not yet completed:

Contract description	Location	Employer	Contract amount	Expected completion date (month and year)

3

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Contractor

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Witness 1

--

Witness 2

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Employer

--

Witness 1

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Witness 2

B.8. List the three (3) largest contracts/assignments completed by you in the last three years:

Work performed	Employer	Contact person & telephone number	Contract amount

B.9. Declaration (to be signed in the presence of a Commissioner of Oaths):

I,,
the undersigned,

(a) warrant that I am duly authorized to depose to this Affidavit on behalf of
.....;
and

(b) confirm that the contents of this Affidavit are within my personal knowledge, and are, save where stated otherwise, to the best of my knowledge and belief both true and correct.

SIGNED BY THE DEPONENT:

Name of deponent	Signature	Date

--	--	--

Duly authorized to sign on behalf of:

Address:

Telephone:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

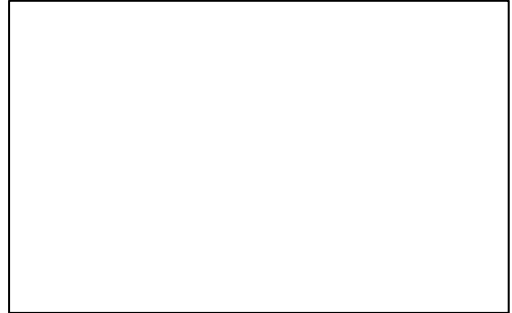
Signed and sworn to before me aton this
..... day of 20..... by the Deponent, who has acknowledged
that he/she knows and understands the contents of this Affidavit, that it is true and correct
to the best of his/her knowledge and that he/she has no objection to taking the prescribed
oath, and that the prescribed oath will be binding on his/her conscience.

Signed:

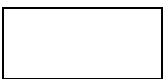
.....

Commissioner of Oaths

Official Stamp:



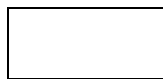
NOTE: All pages of this Affidavit must be initialed by both the Deponent and the Commissioner of Oaths



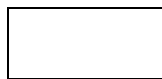
Contractor



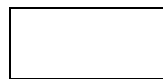
Witness 1



Witness 2



Employer



Witness 1



Witness 2

Annexure C

Letter of Undertaking from a Targeted Enterprise to act as a Subcontractor

Employer	
Project description	
Tender number	
Project reference number	

FROM: (name and address of targeted enterprise)

Name	
Address	

TO: (name and address of contractor)

Name	
Address	

The undersigned undertakes to perform the following works and/or provide the following services in connection with the above-mentioned contract:

.....

for an estimated amount of R.....excluding preliminaries, contingencies, escalation and value added tax subject to the terms of any agreement made between us for the purposes of the contract.

The status of the undersigned as a targeted enterprise is confirmed in the attached targeted enterprise declaration affidavit

Name	Signature	Designation	Date

who duly warrants that he/she is authorized to sign this letter.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT : RFP/01/2023-24

Section C3.4 Construction

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.4 CONSTRUCTION

C3.4.1 WORK SPECIFICATIONS

C3.4.1.1 Applicable Standardised Specifications

The following SANS Standardised Specifications for civil engineering construction are applicable:

SANS 1200A	:	GENERAL
SANS 1200AB	:	ENGINEER'S OFFICE
SANS 1200C	:	SITE CLEARANCE
SANS 1200 D	:	EARTHWORKS
SANS 1200DB	:	EARTHWORKS (PIPE TRENCHES)
SANS 1200DM	:	EARTHWORKS (ROADS, SUBGRADE)
SANS 1200G	:	CONCRETE (STRUCTURAL)
SANS 1200 H	:	STRUCTURAL STEELWORK
SANS 1200 L	:	MEDIUM-PRESURE PIPELINES
SANS 1200 LB	:	BEDDING (PIPES)
SANS 1200 LC	:	CABLE DUCTS
SANS 1200 LD	:	SEWERS
SANS 1200 ME	:	SUBBASE
SANS 1200MFL	:	BASE (LIGHT PAVEMENT STRUCTURES)
SANS 1200 MJ	:	SEGMENTED PAVING
SANS 1200 MK	:	KERBING AND CHANNELLING
SANS 10142	:	ELECTRICAL STANDARD SPECIFICATION

The term "project specification" must be replaced by "scope of works" wherever it appears in these standardised specifications.

C3.4.1.4 Variations and Additions to the SANS Standardised Specifications
Variations and additions to Standardised Specifications Civil and Electrical specifications listed in C3.4.1 are given in section C3.4.6.

C3.4.1.5 Particular Specifications

The following Particular Specifications for work not covered by the SANS 1200 Standardised Specifications are also included hereunder:

AO : Occupational Health and Safety

C3.4.2 SITE ESTABLISHMENT

C3.4.2.1 Services and facilities provided by the Employer

1. Water Supply

The Contractor shall, in accordance with the provisions of sub clause C3.4.2.2(b), and at his own cost, make all arrangements necessary for the supply and distribution of water required for construction purposes as well as for use in and about his site establishment and for human consumption.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

2. Electrical Power Supply

The Contractor shall, in accordance with the provisions of sub-clause C3.4.2.2(c), and at his own cost, make all arrangements necessary for the supply and distribution of electrical power required for construction purposes as well as for use in and about his site establishment.

The Contractor shall comply with all prevailing legislation in respect of the generation and distribution of electricity and shall, when required by the Engineer, produce proof of such compliance.

3. Excrement disposal

No water-borne sewage or other off-site excrement disposal systems are available in the vicinity of the Site.

4. Area for Contractor's Site establishment

A specific area in close proximity to or on the Site of the Works will be made available by the Employer to the Contractor for the Contractor's site establishment. The specific area for the Contractor's site establishment will be identified to the Contractor by the Engineer and the Contractor shall have sole use of such area, free of charge, for the duration of the Contract. The Contractor shall use this area only for the purpose of erecting his site offices, workshops, stores and other facilities required for the execution of the Contract. The Contractor shall not use the area nor allow it to be used for any purpose not directly associated with the execution of the Contract.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may require in the area, as well as elsewhere on the Site.

Should the Contractor deem the area made available by the Employer to be inadequate or unsuitable for the Contractor's particular needs, then the Contractor shall be at liberty to make his own arrangements with the owners of other sites which he considers are better suited to his needs; provided always that the use by the Contractor of any area other than that made available to him by the Employer shall be subject to the prior written approval of the Engineer, which approval shall have no claim against the Employer in respect of any costs incurred by him, either directly or indirectly in consequence of utilizing any area than that made available to him by the Employer, and which costs exceed those costs allowed for the Contractor in his Tender.

C3.4.2.2 Facilities provided by the Contractor

1. Facilities for the Engineer

The Contractor shall provide on the Site, for the duration of the Contract and for the exclusive use of the Engineer and/or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in terms of this specification shall constitute grounds for the Engineer to withhold payment of the Contractor's tendered Preliminary and General

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

items until the facility has been provided or restored as the case may be.

(i) Office accommodation

No separate office is required for the Engineer or his Representative, but the Contractor must provide a suitable office desk with lockable drawers, an office chair and a lockable plan cupboard in one of his offices, for the exclusive use of the Engineer and his Representative.

The Engineer and his Representative shall be allowed free use of all the Contractor's site facilities.

The Engineer and the Engineer's Representative shall be allowed free use of survey equipment and assistants to carry out control work as and when required, and the Contractor shall provide all pegs, concrete, tools and other necessary items as well as necessary labour for excavation, bush clearing, mixing and placing of concrete, as and when required for the control of the setting out of the Works.

(ii) Carports

The Contractor shall provide on Site for the duration of the Contract, one carport for the sole use of the Engineer and his staff. Each carport shall be constructed so that the vehicle parked under it is always protected against the direct rays of the sun. The carport area shall be at least 20 m² and the floor shall be covered with a layer of crushed stone to alleviate dusty and muddy conditions. The carport(s) shall be positioned so as to provide easy and convenient access to the Engineer's office.

(iii) Site meeting venue

The Contractor shall provide within his own site establishment facilities, a suitably furnished office or other venue capable of comfortably accommodating a minimum of six (6) persons at site meetings. The Engineer shall be allowed free use of such venue for conducting any other meetings concerning the Contract at all reasonable times.

(iv) Contract name boards

The Contractors shall provide, erect and maintain two contract name board at such position and location directed by the Engineer, which name boards shall, unless otherwise specified elsewhere in the Contract, comply with the recommendations for the standard board of the South African Association of Consulting Engineers, with regard to size, painting, decorating and detail, and the requirements described hereunder.

Each name board shall be made of tempered hardboard with a thickness of at least 12 mm, so braced on the reverse side as to prevent warping and shall be mounted on two or more, as necessary, firmly planted poles. The painting of the boards shall comply with the relevant requirements of CKS 193 and the colours of the paints shall be an acceptable match to the applicable colours given in SANS 1091.

The Contractor shall keep the contract name boards in good state of repair for

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

the duration of the Contract and shall remove them on completion of the Contract.

(v) Survey equipment and assistants

- Survey equipment

Whenever reasonably required by the Engineer, the Contractor shall make available to the Engineer or his representative, the following additional survey equipment:

- 1 tacheometer with tripod;
- 1 survey staff for tacheometer;
- 1 Distomat, complete with tripod and fully charged battery.

All such survey equipment provided by the Contractor shall be in good condition, properly calibrated and fit for the purpose and shall be kept fully serviceable at all times by the Contractor at his own cost. The Contractor shall have any defective equipment repaired or replaced at his own cost within 12 hours after notification by the Engineer's staff.

Where required by the Engineer, the Contractor shall at his own cost, promptly arrange for the recalibration of survey equipment provided.

(vi) Computer facilities

The Contractor shall, for the duration of the Contract, provide the computer equipment together with the software specified hereunder, for the exclusive use of the Engineer and his staff.

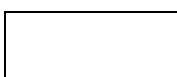
- 1 computer
- 1 printer

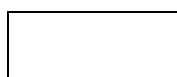
The computers shall comply with the following minimum specifications:

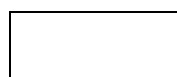
- Intel core
- 1GB RAM
- 100 GB hard disk
- 101 type keyboard
- 15"SVGA colour monitor
- 1,44 Mb 3,5" FDD
- 8 Mb AGP display adapter
- One parallel and two serial ports
- Mini-tower case, including 220V power supply unit
- Three-button mouse with mouse pad
- Fax/voice/data modem

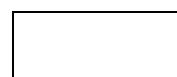
Printers shall, unless otherwise approved by the Engineer, be Hewlett-Packard 600 Series DeskJet printers or equivalent compatible.

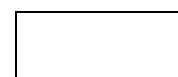
All computer hardware shall be provided complete with the requisite connecting cables and all interfacing devices and software necessary for its efficient operation as an integral system.

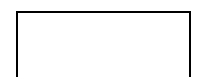

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

The following software shall be properly installed on the computer, and the original licence agreements and disks shall be provided to the Engineer for safekeeping:

- (a) Microsoft Windows 2010
- (b) MS-Office and MS Excel

All computer equipment provided shall be kept fully serviceable at all times by the Contractor. The Contractor shall have any defective equipment repaired or replaced at his own cost within 12 hours after notification by the Engineer's staff.

The Contractor shall further provide at his own cost, all paper and black ink cartridges and other consumables reasonably required by the Engineer.

(vii) Electricity supply for the Engineer

All electricity supply to the Engineer's office(s) and laboratory (if applicable), whether provided by the Contractor by way of a reticulated supply from a local authority or other authorized electricity supply, or by way of on-site generators, shall be regulated by the Contractor to within limits such as to prevent damage due to fluctuations in the electrical current supply that may occur to any electrical plant and equipment provided by the Contractor or the Engineer.

The Contractor shall be liable for and pay to the Engineer on demand, all costs that the Engineer may incur in the repair or replacement of any electrical equipment provided by the Engineer on the Site. Reliance by the Contractor on the regulation of the electrical supply by the supplier or on current regulators fitted to generators shall not absolve the Contractor of his liabilities in terms of this Sub clause and, where appropriate, the Contractor shall provide and install at his own cost, all such electrical current-regulating equipment as is necessary to prevent damage to the said equipment.

2. Water

The Contractor shall, at his own expense, be reasonable for obtaining and distributing all water as may be required for the purposes of executing the Contract, including water for both construction purposed and domestic use, as well as for making all arrangements in connection therewith. The Contractor shall further, at his own expense, be responsible for providing all necessaries for procuring, storing, transporting and applying water required for the execution of the Contract, including but not limited to all piping, valves, tanks, pumps, meters and other plant and equipment, as well as for all work and superintendence associated therewith.

The sources of all water utilized for the purposes of the Contract shall be subject to the prior approval for the Engineer, which approval shall not be unreasonably withheld.

The Contractor shall comply with all prevailing legislation in respect of drawing water from natural and other sources and shall, when required by the Engineer,

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

produce proof of such compliance. The distribution of water shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

All water provided by the Contractor for construction purposes shall be clean, free from undesirable concentrations of deleterious salts and other materials and shall comply with any further relevant specifications of the Contract. The Contractor shall, whenever reasonably required by the Engineer, produce test results demonstrating such compliance. Water provided by the Contractor for human consumption shall be healthy and potable to the satisfaction of the health authorities in the area of the Site.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of water, the costs of which will be deemed to be included in the Contractor's tendered rates.

3. Electricity

The Contractor shall, at his own expense, be responsible for obtaining and distributing all electricity as he may require for the purposes of executing the Contract, including electricity for both construction purposes and domestic use, as well as for making all arrangements in connection therewith.

The distribution of electricity shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of electricity, the costs of which will be deemed to be in the Contractor's tendered rates and prices.

4. Excrement disposal

The Contractor shall, at his own expense, be responsible for safely and hygienically dealing with and disposing of all human excrement and similar matter generated in the Site during the course of the Contract, to the satisfaction of the responsible health authorities in the area of the Site and the Engineer. All such excrement shall be removed from the Site and shall not be disposed of by the Contractor on the Site.

The Contractor shall further comply with any other requirements in this regard as may be stated in the Contract.

No separate payment will be made to the Contractor in respect of discharging his obligations in terms of this sub clause and the costs thereof shall be deemed to be included within the Contractor's tendered Preliminary and General items.

C3.4.2.4 Permits and wayleaves

The Employer shall be responsible to obtain all the wayleaves required for this Contract.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.4.2.5 Features requiring special attention

(a) Site maintenance

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

(b) Testing and quality control

(i) Contractor to engage services of an independent laboratory

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Contract. These results will be taken into consideration by the Engineer in deciding whether the quality of materials utilized and workmanship achieved by the Contractor comply with the requirements of the Specifications. The foregoing shall apply irrespective of whether the specifications indicate that the said testing is to be carried out by the Engineer or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Engineer with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an “independent laboratory” shall mean an “approved laboratory” (as defined in sub clause PSA 7.2) which is not under the management or control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

(ii) Additional testing required by the Engineer

In addition to the provisions of sub clause C3.4.2.5(b)(i): Contractor to engage services of an independent laboratory, the Engineer shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any such tests, additional to those described in the sub clause C3.4.2.5(b)(i), at such times and at such locations in the Works as the Engineer shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Engineer, and the copies of the test results shall be promptly submitted to the Engineer.

(iii) Costs of testing

(a) Tests in terms of sub clause C3.4.2.5(b)(i)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (b) The costs of all testing carried out by the independent laboratory in accordance with the requirements of sub clause C3.4.2.5(b)(i), above shall be borne by the Contractor and shall be deemed to be included in the tendered rates and prices for the respective items of work as listed in the Bill of Quantities and which require testing in terms of Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of sub clause C3.4.2.5(b)(i).

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (e.g. re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

- (c) Additional tests required by the Engineer

The costs of any additional tests required by the Engineer in terms of sub clause C3.4.2.5(b)(i): Additional tests required by the Engineer, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Bill of Quantities; provided always that the costs of any such additional tests ordered by the Engineer, the results of which indicate that the quality of the materials utilized and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

(c) Subcontractors (see also, Section: C3.3; Procurement: C3.3.3)

All matters pertaining to subcontractors (including Nominated Subcontractors) and the work executed by them shall be dealt with directly between the Engineer and the Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Engineer will not liaise directly with any subcontractors nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising from the subcontract agreements shall be dealt with directly between the Contractor and the subcontractors and the Engineer will not become involved.

(d) Opening up and closing down of designated borrow pits

Measurement and payment for opening up and closing down designated borrow pits, including removing and stockpiling overburden and restoring the Site, shall be made under item 8.3.4 of SANS 1200D. This item applies to all borrow material required under this Contract.

The requirements of sub clause 5.2.2.2 of SANS 1200D regarding the opening up, maintenance and closing down borrow pits shall be adhered to.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(e) Access to properties

The Contractor shall organize the work to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work, and expect as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to Clause 8.1.2 of the Conditions of Contract.

If, as a result of restricted road reserve widths and the nature of the work, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.

Notwithstanding the foregoing, the Contractor may, with the prior approval of the Engineer (which approval shall not be unreasonably withheld), make arrangements with and obtain the acceptance of the occupiers of erven and properties to close off part of a street, road, footpath or entrance temporarily, provided that the Contractor duly notifies the occupiers of intended closure and its probable duration, and reopens and route as punctually as possible. Where possible, such streets, roads, footpaths and entrances shall be made safe and reopened to traffic overnight. Such closure shall not absolve the Contractor from his obligations under the Contract to provide access at all times. Barricades, traffic signs, drums and other safety measures appropriate to the circumstances shall be provided by the Contractor to suit the specific conditions.

(f) Existing residential areas

Electricity and water supply interruptions in existing residential area shall be kept to a minimum. The Engineer's approval shall be obtained prior to such interruptions and residents shall be notified in writing at least 24hours but not more than 48 hours in advance. Supplies shall be normalized by 16:00 on the same day.

(g) Labour-intensive competencies of supervisory and management staff

Contractor having a CIDB contractor grading designation of 5CE/6CEPE and higher shall only engage supervisory and management staff in labour intensive works who have either completed, or for a the period 1 May 2004 to 30 June 2006, are registered for training towards, the skills programme outlined in Table1.

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 1CE, 2CE, 3CE and 4CE shall have personally completed, or for the period of 1 May 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 May 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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader/ supervisor	4	Implement Labour-Intensive Construction Systems and Techniques	This unit standard must be completed, and
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	
Site agent/ Manager (i.e. the contractor's most senior representative who is resident on the site)	5	Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures	Skills Programme against this single unit standard
		Manage Labour-Intensive Construction Processes	

(h) 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 executions 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 for the municipality is R 90.00 per task or per day and shall not be lower than the Ministerial Determination for the Expanded Public Works Programme.
“In accordance with the Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes (clause 10.4), the public body must set a rate of pay (task-rate) for workers to be employed on the labour-intensive projects.

Clause 10.4 requires that the following should be considered when setting rates of pay for workers:

10.4.1 The rate set should take into account wages paid for comparable unskilled Work in the local area per sector, if necessary.

10.4.2 The rate should take an appropriate wage to offer an incentive for work, to reward effort provided and to ensure a reasonable quality or work. It should not be more than the average local rate to ensure

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

people are not recruited away from other employment and jobs with longer-term prospects.

10.4.3 Men, women, disabled persons and the aged must receive the same pay for work of equal value.

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 task 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 pervious 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 earing an income;
- (c) those who are not in receipt of any social security pension income.

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

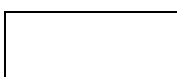
- (a) 60% women;
- (b) 55% youth who are between the ages of 18 and 35; and
- (c) 2% on persons with disability.

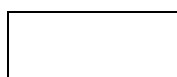
1.2 **Specific provisions pertaining to SANS 1914-5**

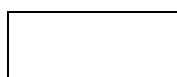
1.2.1 Definition

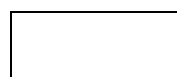
Targeted labour: Unemployed persons who are employed as local labour project.

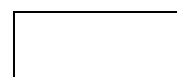
1.2.2 Contract participation goals

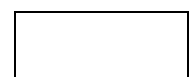

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

1.2.2.1 The **Contract participation goal** shall be measured in the performance of the Contract to enable the employment provided to targeted labour to be qualified.

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.

1.2.3.1 Variations to SANS 1914-5

1.2.3.1.1 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.

1.2.3.1.2 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 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: 012 328 6820 or email Cinderella.makunike@dpw.gov.za,
Tel: 083 677 4026.

1.3.3 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 or ten (10) days if he/she is employed for 4 months or more.

1.3.4 The Contractor shall do nothing to dissuade targeted labour from participating in training programmes.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1.3.5 An allowance equal to EPWP Minimum wage rate as stipulated in the Ministerial Determination for EPWP Workers, shall be paid by the Contractor to workers who attend formal training, in terms of 1.3.4 above.

1.3.6 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.

1.4 PPE for Local Labour

1.4.1 All PPE provided to local labour working on the Expanded Public Works Programme shall be branded in accordance with the EPWP CI Manual. Typical elements which shall be branded include:

- Protective overalls
- Reflective vests
- Protective headwear

1.4.2 The rate for local labour shall include for the supply of EPWP branded PPE in accordance with the Provincial EPWP specifications. The rate shall include the additional cost of the specified colours for the PPE and branding in accordance with CI manual.

1.5 Reporting on local labour

1.5.1 The following information shall be maintained on site and submitted in electronic/hard copy formats:

- Certified ID copies of all locally employed labour
- Signed Contracts between the employer and the EPWP Participants
- Attendance Registers for the EPWP Participants
- Proof of Payment of EPWP Employees and monthly reporting as per EPWP requirements.

(i) Employment of local labour

It is the intention that the Contract should make maximum use of the local labour force that is presently unemployed. To this end the Contractor shall limit the utilisation on the Contract of non-local employees to that of key personnel only and to employ and train local labour to the extent necessary for the execution and completion of this Contract.

The Contractor shall fill in the form entitled Key Personnel in the Forms to be completed by the Tender. The data on the above-mentioned form will be strictly monitored during the Contract period and any deviations therefrom shall be subject to the approval of the Engineer, which approval shall not be unreasonably withheld.

(j) Monthly statements and payment certificates

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The statement to be submitted by the Contractor in terms of Clause 6.10 (GCC2015) of the Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Engineer, in digital electronic format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two (2) A4 size paper copies of the statement.

For the purposes of the Engineer's payment certificate, the Contractor shall subsequently be responsible, at his own cost for making such adjustments to his statement as may be required by the Engineer for the purposes of accurately reflecting the actual quantities and amounts which the Engineer deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Engineer within three (3) normal working days from the date on which the Engineer communicated to the Contractor the adjustments required. The Contractor shall submit to the Engineer five (5) sets of A4 size paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the sad adjustments and submitting to the Engineer the requisite copies of the adjusted statement for the purposes of the Engineer's payment certificate will be added to the times allowed to the Engineer in terms of Clause 6.10.4 (GCC 2015) of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

(k) Construction in restricted area

Working space is sometimes restricted. The construction method used in these restricted areas largely depends on the Contractor's Plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any difficulties encountered by the Contractor while working in restricted areas. No extra payment nor any claim for payment due to these difficulties will be considered.

(l) Notices, signs, barricades and advertisements

All notices, signs and barricades, as well as advertisements, may be used only if approved by the Engineer. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Engineer shall have the right to instruct the Contractor to move any sign, notice or advertisement to another position, or to remove it from the Site of the Works if in his opinion it is unsatisfactory, inconvenient or dangerous.

(m) Workmanship and quality control

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced engineers, foreman, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing carried out by the Contractor, will be deemed to be included in the rates tendered for the related items of work.

The Contractors' attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of testing required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Engineer for examination and measurement, the Contractor shall furnish the Engineer with the results of the relevant tests, measurements and levels to demonstrate the achievement of compliance with the Specifications.

C3.4.2.6 Extension of time due to abnormal rainfall

- (a) Extension of time in respect of delays resulting from wet climatic conditions on the Site will only be considered in respect of abnormally wet climatic conditions and shall be determined for each calendar month or part thereof, in accordance with the formula given below:

$$V = (Nw - Nn) + (Rw - Rn)/x$$

in which formula the symbols shall have the following meanings:

V = Potential extension of time in calendar days for the calendar month under consideration:

If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.

When the value of V for any month exceeds the number of days in the particular month, V will be the number of days in the month.

Nw = Average number of days in the calendar month under consideration on which a rainfall of Ymm or more was recorded on the Site.

Nn = Average number of days, derived from existing records of rainfall in the region of the Site, on which a rainfall of Y mm or more was recorded for the calendar month

Rw = Actual rainfall in mm recorded in the Site in an approved rain gauge for the calendar month under consideration

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

R_n = Average rainfall in mm for the calendar month, derived from existing records of rainfall in the Region of the Site

The factor ($N_w - N_n$) shall be deemed to be a fair allowance for variations from the average number of days during which the rainfall did not exceed Y mm but wet conditions prevented or disrupted work.

- (b) The rainfall records at rainfall station nearest to the site, obtainable from the South African weather Services for the period 1990 to date will be used, and the monthly averages (R_n and N_n) for this period shall, for the purposes of this Contract be taken as normal and as the values to be substituted for R_n and N_n in the formula above. The values of X and Y shall be 20 and 10 respectively.

The potential extension of time V has been calculated for each month and year of the period concerned to indicate the possible effect of the rainfall formula. The values of V were obtained by applying the rainfall and using the actual rainfall figures and the calculated values of R_n and N_n indicated in the table.

- (c) The Contractor shall, at his own cost, provide and erect on the Site at a location approved by the Engineer, an approved rain gauge, which shall be fenced off in a manner which will prevent any undue interference by workman and others. The Contractor shall, at his own cost, arrange for the reading of the rain gauge on daily basis for the duration of the Contract. The gauge readings, as well as the date and time at which the reading was taken shall be recorded in a separate record book provided by the Contractor for this purpose. All entries in the rainfall record books shall be signed by the person taking the reading and the gauge shall be properly emptied immediately after each reading has been taken. If required by the Engineer, the Engineer shall be entitled to witness the reading of the gauge.
- (d) The Contractor's claims in terms of Clause 5.12 (GCC 2015) of the Conditions of Contract for the extension of time in respect of delays resulting from wet climatic conditions on the Site during each month, shall be submitted in writing to the Engineer monthly;

Always provided that:

- (i) the period allowed to the Contractor in terms of Clause 10 (GCC 2015) of the Conditions of Contract in which to submit his claim for each month shall be reduced to seven (7) days, calculated the last day of the month to which the claim applies; and
- (ii) the 28-day period allowed to the Engineer in terms of Clause 10.1.2 (GCC 2015) of the Conditions of Contract in which to give his ruling on the claim, shall be reduced to fourteen (14) days.

The Contractor's monthly claim shall be accompanied by a copy of the signed daily rainfall readings for the applicable month.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(e) The extent of any extension of time which may be granted to the Contractor in respect of wet climatic conditions (whether normal or abnormal) shall be determined as the algebraic sum of the "V" for each month between the Commencement Date and the Due Completion Date of the Contract, calculated in accordance with the sub clause C3.4.2.6(a) above.

provided always that ;

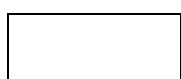
- (i) rainfall occurring within the period of the Contractor's Christmas shut-down period (referred to in the Conditions of Contract) shall not be taken into account in the calculation of the monthly "V" values.
 - (ii) rainfall occurring during any period during which the Contractor was delayed due to reasons other than Wet climatic conditions on the Site, and for which delay an extension of time is granted by the Engineer, shall not be taken into account in the calculation of the monthly "V" values;
 - (iii) if the algebraic sum of the "V" values for each month is negative, the time for completion will not be reduced on account of subnormal rainfall, and
 - (iv) where rainfall is recorded only for part of a month, the "V" value shall be calculated for that part of the month using pro rata values for Nn and Rn.
- (f) The Engineer shall, simultaneous with granting any extension of time in terms of this clause, revise the Due Completion Date of the Contract to reflect an extension of time having been granted in respect of wet climatic conditions, to the extent of the algebraic sum of all "V" values for all the preceding months of the Contract, less the aggregate of the "Nn" values for the remaining (unexpired) months of the Contract (viz less aggregate of the potential maximum negative "V" values for the remaining Contract Period). Thus, provided that where such period is negative, the Due Completion Date shall not be revised.
- (g) Any extension of time in respect of wet climatic conditions granted in terms of this clause shall not be deemed it take into account delays experienced by the Contractor in repairing or reinstating damage to or physical loss of the Works arising from the occurrence of abnormal climatic conditions. Extension of time in respect of any such repairs or reinstatement regarding damage shall be the subject of a separate application for extension of time in accordance with the provisions of Clause 5.12 (GCC 2015) and Clause 10 (GCC 2015) of the Conditions of Contract.

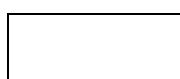
C3.4.3 Plant and Material equipment

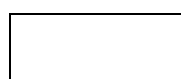
C3.4.3.1 Plant and material supplied

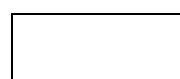
The Employer shall not supply any plant or materials.

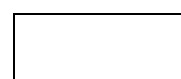

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

C3.4.3.2 Material, samples and shop drawings

(a) Samples

Materials or work which does not conform to the approved samples submitted in the terms of Clause 7.4.1 (GCC2015) of the Conditions of Contract, will be rejected. The Engineer reserves the right to submit samples to tests to ensure that the material represented by the sample meets the specification requirements.

The cost of any such tests conducted by or no behalf of the Engineer , the results of which indicate that the samples provided by the Contractor do not conform to the requirements of the Contract, shall in accordance with the provisions of Clause 7.4.4 (GCC2015) of the Conditions of Contract, be for the Contractor's account.

C3.4.5 Existing Services

C3.4.5.1 Known Services

All known services are indicated on the drawings, to the best knowledge of the employer.

C3.4.6 Construction Issues

All construction issues shall be as specified in Scope of Work.

C3.4.7 Contractor's Employees

1. MINIMUM EMPLOYMENT CONDITIONS FOR CONVENTIONAL CONSTRUCTION WORKS (DOES NOT APPLY TO EPWP WORKERS FOR LIC WORKS)

Contractors shall comply with the Basic Conditions of Employment Act (Act No 75 of 1997).

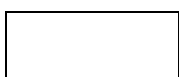
As a determination has not been made in terms of the aforesaid Act for the building sector, the minimum employment conditions which will apply to this Contract shall be guided by the Sectorial Determination: Civil Engineering Sector published in the Government Gazette dated 2 March 2001.

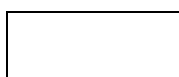
The following minimum conditions shall apply to this Contract and Contractors shall include such conditions in employment contracts.

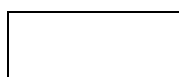
1.1 Employment contracts

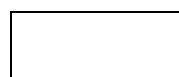
The Contractor shall enter an employment contract with every one of his/her employees, including short-term contracts i.e. contracts in which employment commencement and employment termination dates are specified. Short-term employment contracts will also apply an employee employed for only one day.

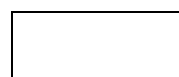

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

1.2 Normal working hours

Normal working hours are from 07:00 to 17:00 from Monday to Friday. A tea break is taken from 09:00 to 09:15 and lunch from 12:30 to 13:00.

Actual hours to work and be paid for is 9 hours per day. If a lunch break of one (1) is taken then the normal working day will be as follow:

Morning work sessions from 07:00 to 12:00, lunch break from 12:00 to 13:00, and afternoon sessions from 13:00 to 17:00.

1.3 Minimum wages

Minimum wages shall be in strict accordance with the minimum statutory wage for the civil engineering sector as published in the Government Gazette of 25 May 2009, Regulation Gazette No.9141, Volume 530, Number 32525. The minimum wage for all employees in the Civil Engineering Sector will be as & when amended from time to time:

01 September 2010 to 31 May 2011 – Previous Year Rate + CPI (eoe)
01 September 2011 to 31 May 2012 – Previous Year Rate + CPI (eoe)

Overtime pay shall be 1.5 times the ordinary wage.
An employee shall be paid monthly.

1.4 Short time (excluding short time due to inclement weather)

If for reasons, which may be ascribed to the employee, e.g. arriving late for work or taking an afternoon off, the hours not worked shall be deducted from the daily wage calculation.

1.5 Short time resulting from inclement weather

- i. If the Contractor informs his/her employees that no work will be done the following day due to inclement weather, no payment will be due to the employee for such a day.
- ii. If the Contractor has not informed his/her employees that no work will be done due to inclement weather and no work or less than four (4) hours of work is possible during a day, the Contractor must pay the employee for four (4) hours of work. If more than four (4) hours of work is done, the Contractor shall pay the employees for the number of hours worked.

1.6 Vacation leave

If an employee has been in full time employment for more than four (4) months, he/she shall be entitled to 1 day's paid leave for every seventeen (17) days the employee worked or was entitled to payment.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1.7 Family responsibility leave

If an employee has been in full time employment for more than four (4) months, he/she shall be entitled to three days paid leave in a leave cycle of thirty-six (36) months of employment:

- i. When the employee’s child is born;
- ii. When the employee’s child is sick;
- iii. In the event of death of the employee’s spouse or life partner, parent, grandparent, child or grandchild.

The employee shall provide the required proof to the Contractor of the event, failing which the leave shall be unpaid leave.

1.8 Maternity leave

At least (4) months unpaid leave.

1.9 Sick leave

The employee shall be entitled to one (1) day’s paid sick leave of normal wages for every twenty-six days worked.

If an employee is absent for three (3) or more consecutive days, the employee shall provide a sick certificate form a registered medical practitioner to qualify for sick leave payment. If such certificate is not provided, no sick leave payment will be due to the employee.

1.10 Piece work

Irrespective of the quantity of work done under a piece work system during a working week, the employee shall be entitled to a minimum of a week’s wages determined as if no piece work applied.

The Contractor or employee may terminate an employment contract by giving notice of termination of not less than:

- i. On short period contracts i.e. a contract which stated from which date work employment commences and on which day employment terminates, the terms of the employment contract shall apply;
- ii. One week if employee has been employed for four (4) weeks or less, unless it is a short-term project.
- iii. Two (2) weeks if employee has been employed for more than four (4) weeks but not more than one (1) year.
- iv. Four (4) weeks if employee has been employed for more than one year.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT : RFP/01/2033-24

Section C3.5 Management

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.5 MANAGEMENT

C3.5 MANAGEMENT

C3.5.1 Generic Specifications

The SANS 1200 Standardized Specifications listed in 4.1.1 are applicable.

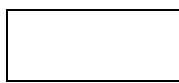
SANS 1200A	:	GENERAL
SANS 1200C	:	SITE CLEARANCE
SANS 1200 D	:	EARTHWORKS
SANS 1200DB	:	EARTHWORKS (PIPE TRENCHES)
SANS 1200DM	:	EARTHWORKS (ROADS, SUBGRADE)
SANS 1200G	:	CONCRETE (STRUCTURAL)
SANS 1200 L	:	MEDIUM-PRESURE PIPELINES
SANS 1200 LB	:	BEDDING (PIPES)
SANS 1200 M	:	CABLE DUCTS
SANS 1200 ME	:	SUBBASE
SANS 1200MF	:	BASE (LIGHT PAVEMENT STRUCTURES)
SANS 1200 MJ	:	SEGMENTED PAVING
SANS 1200 MK	:	KERBING AND CHANNELLING

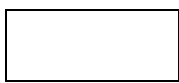
The SANS 10142, 60529, 1186, 1507-3 Standardized Electrical Specifications listed in 4.1.1 are applicable.

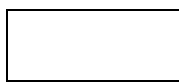
C3.5.2 Accommodation of traffic

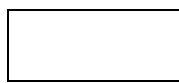
The following contain the Employer’s general requirements for accommodating the traffic during construction:

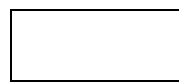
- i) The travelling public shall have the right of way on public roads and the contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.
- ii) Failure to maintain road signs, warning signs, etc. in good condition shall constitute ample reason for the engineer to bring the works to a stop until the road signs, etc. have been repaired to his satisfaction.
- iii) The contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual Volume 2 Chapter 13.
- iv) The contractor shall submit proposals in connection with directional signs to the engineer for approval prior to construction.
- v) Sufficient signage shall be provided, erected and relocated as necessary by the contractor to reroute traffic onto the deviations.
- vi) Temporary closures of up to a maximum of four hours during daytime will be allowed for blasting and cleaning of the road where the construction of temporary deviations will not be possible. The travelling public and local residents shall be notified of these closures well in advance.

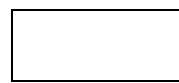

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

- vii) The Contractor shall also provide a full time traffic safety officer for the duration of the contract.
- viii) The Contractor will be allowed to use prefabricated pipes for the storm water drainage in temporary deviations.

C3.5.3 Extension of time on account of abnormal rainfall

RAINFALL TABLE

The latest records should be obtained from the National Weather Office if required for Matjhabeng Local Municipality.

Table 1: 24 Hour Design Rainfall for Various Recurrence Intervals

Duration		Return Period (Years)						
(m/h/d)		2	5	10	20	50	100	200
24	hr	57.9	78.2	92.2	106.2	125.2	139.9	155.1
1	day	48.1	65	76.7	88.4	104.1	116.4	129
2	day	59.1	79.8	94.2	108.5	127.9	143	158.5
3	day	66.7	90.1	106.3	122.4	144.2	161.2	178.8
4	day	72.1	97.3	114.9	132.3	155.9	174.3	193.2
5	day	76.5	103.4	122	140.6	165.6	185.1	205.3
6	day	80.4	108.6	128.2	147.7	174	194.5	215.6
7	day	83.8	113.3	133.7	154	181.4	202.8	224.8

Mean Annual Rainfall = 497mm

- (a) The Contractor shall make due allowance within his programme submitted in terms of Clause 5.6 (GCC 2015) of the Conditions of Contract, for a total anticipated delay to items on the critical path resulting from wet climatic conditions, of 14 normal working days (as defined in Clause 5.8 (GCC 2015) of the Conditions of Contract) during the Contract.
- (b) Extension of time, if granted by the Engineer, will be determined as the aggregate number of normal working hours for which all progress on the item or items on the critical path was brought to a halt as a result of wet conditions, less the number of normal working days specified in sub clause (a) above.
- (c) In determining the revised Due Completion Date of the Contract, the Engineer shall add the equivalent number of normal working days delay determined in accordance with sub clause and all the intervening normal non-working days to the prevailing Due Completion Date

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.5.4 Community participation

Community participation consists of engagement of Project Steering Committees (PSC). A PSC will be established for the town by the Ward Councillor. The functions of the PSC will be to:

- Assist in monitoring the project
- Ensure that the community provides assistance to the contractor to ensure that he can execute the contract in accordance with the specifications and within time.
- Encourage the community to participate in the Labour Intensive construction.
- Identify skills, skilled personnel and suppliers in the town.

The PSC will not have the power to:

- Give any instructions to the contractor, except through the engineer.
- Become involved in the daily operations of the contractor or interfere with the contract works.

A monthly meeting will be held with the PSC to discuss relevant matters. The site agent and resident engineer will attend the meetings. The contractor will have to report on progress, deviations from the programme, financial matters, community related aspects, general problems and co-operation at the meeting. The PSC members will not receive any remuneration for attending, and they must provide their own transport.

C3.5.5 Restrictions on the use of personnel in the permanent employment of the Contractor

- (a) The Contractor shall limit the use of his permanently employed personnel to that of key personnel only and shall, subject to the further provisions of the Scope of Work execute and complete the works using a temporary workforce working directly for the Contractor and/or for subcontractors.
- (b) The Engineer may at his discretion, upon receipt of a written and fully motivated application from the Contractor and where he deems the circumstances to warrant authorize in writing that the Contractor may use workers not being his key personnel but who are in his permanent employ in execution of the Works. Without limiting the generality of application of this sub clause, circumstances which may be considered by the Engineer to warrant the authorization of the use of the Contractor's permanent employees not being key personnel, include:
 - (i) The unavailability of sufficient numbers of temporary workers and/or subcontractors to execute the Works, provided always that the Contractors has proved that he has exercised his best endeavours and taken all reasonable actions to recruit sufficient numbers to temporary workers and subcontractors and has exhausted all reasonable recruitment options;
 - (ii) The unavailability within the temporary worker pool and/or subcontractor sources available to the Contractor in terms of the Contract, or sufficient of the required knowledge and skills necessary for the execution of the Works or specific portions thereof, in cases where the time of completion allowed in

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

the Contract is insufficient to facilities the creation of the necessary skills through the provision of training as contemplated in this Contract; and

- (iii) Any other circumstance which the Engineer may deem as constituting a warrant.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

Section C3.6

Specifications and Variations and Additions to the Standard Specifications

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.6.1 PARTICULAR SPECIFICATIONS AND VARIATIONS AND ADDITIONS TO THE STANDARD SPECIFICATIONS

PSA GENERAL

PSA 1 SCOPE

REPLACE THE CONTENTS OF SUBCLAUSE 1.1 INCLUDING THE NOTES, WITH THE FOLLOWING:

“1.1 This specification covers requirements, principles and responsibilities of a general nature which are generally applicable to civil engineering construction and building works contracts, as well as the requirement for the Contractor’s establishment on the Site.”

PSA2 INTERPRETATIONS

PSA 2.3 DEFINITIONS

IN THE OPENING PHRASE BETWEEN THE WORDS “specification” AND “the following”, INSERT THE WORDS “the definitions given in the Conditions of Contract and”

(a) General

ADD THE FOLLOWING DEFINITIONS:

“General Conditions and Conditions of Contract”: The General Conditions of Contract specified for use with this Contract, together with the Contract Data (GCC 2015). ‘Specified’: As specified in the Standardized Specifications, the Drawings or the Project Specifications. ‘Specification’ shall have the corresponding meaning.”

(b) Measurement and payment

REPLACE THE DEFINITIONS FOR “Fixed charge”, “Time-related charge” AND “Value-related charge” WITH THE FOLLOWING:

“Fixed charge”: A charge that is not subject to adjustment on account of variations in the value of the Contract Price or the time allowed in the Contract for the completion of the work.

‘Time-related charge’: A charge, the amount of which varies in accordance with the Time for Completion of the Works, adjusted in accordance with the provisions of the Contract.

‘Value-related charge’: A charge, the amount of which varies pro rata with the final value of the measured work executed and valued in accordance with the provisions of the Contract’.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSA 2.4 ABBEVIATIONS

(a) Abbreviations relating to standard documents

ADD THE FOLLOWING ABBREVIATION:

“CKS: SABS Coordinating Specification.”

PSA 3 MATERIALS

PSA 3.1 QUALITY

ADD THE FOLLOWING AT THE END OF SUBCLAUSE 3.1:

“All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified to be in accordance with SABS Specifications shall bear the SABS mark, where such a mark is available for the type or product.”

PSA 4 PLANT

PSA 4.1 SILENCING OF PLANT

REPLACE THE CONTENTS OF SUBCLAUSE 4.1 WITH THE FOLLOWING:

“The Contractor’s attention is drawn to the applicable regulations pertaining to noise and hearing conversation, framed under the Occupational Health and Safety Act. 1993 (Act No 85 of 1993) as amended.

The Contractor shall at all times and at his own cost, be responsible for implementing all necessary steps to ensure full compliance with such regulations, including but not restricted to the provision and use of suitable and effective silencing devices for pneumatic tools and other plant which would otherwise cause a noise level in excess of that specified in the said regulations.

Where appropriate, the Contractor shall further, by means of temporary barriers, effectively isolate the source of such noise in order to comply with the said regulations.

PSA 4.2 CONTRACTOR’S OFFICES, STORED AND SERVICES

ADD THE FOLLOWING PARAGRAPH BEFORE THE EXISTING FIRST PARAGRAPH IN SUBCLAUSE 4.2

“The Contractor’s buildings, sheds and other facilities erected or utilize on the Site for the purposes of the Contract shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. as may be required by the Contractor. The facilities shall always be kept in a neat and orderly condition. No personnel may reside in the Site. Only night-watchmen may be on the Site after hours,”

DELETE “and first-aid services” IN THE SECOND PARAGRAPH OF SUBCLAUSE 4.2 AND ADD THE FOLLOWING:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

“The Contractor shall provide on the Site and in close proximity to the actual locations where the work is being executed, one toilet per 10 workmen, which toilets shall be effectively screened from public view and their use enforced. Such toilets shall be relocated from time to time as the location of the work being executed changes, so as to ensure that easy access to the toilets is maintained.

The Contractor shall, where applicable, make all necessary arrangements and pay for the removal of night soil.

PSA 5 CONSTRUCTION

PSA 5.1 SURVEY

PSA 5.1.2 Preservation and replacement of survey beacons and pegs subject to the Land Survey Act

DELETE THE WORDS

“in vicinity of boundaries” IN THE SECOND OF SUBCLAUSE 5.1.2 AND REPLACE THE WORDS “under the direction of” IN THE SAME SENTENCE WITH “in consultation and liaison with”.

ADD THE FOLLOWING AFTER THE SECOND SENTENCE OF SUBCLAUSE 5.1.2:

“The Contractor and the Engineer shall record on the said list, their concurrence or disagreement (as the case may be) regarding the completeness and accuracy of the details recorded therein.”

REPLACE THE THIRD SENTENCE OF SUBCLAUSE 5.1.2 WITH THE FOLLOWING:

“At the completion of the Contract, the Contractor shall exposes all pegs that were listed at the commencement of the construction as being in order and the Contractor shall arrange with a registered Land Surveyor for the checking of the positions of all such pegs and the replacement of those that the Land Surveyor’s check reveals have become disturbed or damaged. The Contractor shall, as a precedent to the issue of the Certificate of Completion, provide to the Engineer, a certificate from the registered land surveyor, certifying that all the pegs listed at the commencement of construction in accordance with the provisions of this clause, have been checked and that those found to have been disturbed, damaged or destroyed have been replaced in their correct positions, all in accordance with the provisions of the said Act.

The costs of checking, replacement and certification as aforesaid shall be entirely for the Contractor’s account. This, with the provision always that the Contractor shall not be held liable for the cost of replacement of pegs which:

- (a) Cannot reasonably be re-established in their original positions by reason of the finished dimensions of the permanent works, and

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(b) the Contractor can prove beyond reasonable doubt to the satisfaction of the Engineer, were disturbed, damaged or destroyed by others beyond his control.”

PSA 5.3 PROTECTION OF EXISTING STRUCTURES

REPLACE “Machinery and Occupational Safety Act, 1983 (Act No. 6 of 1989)” WITH “Occupational Health and Safety Act, 1993 (Act No 85 of 1993), as amended, AND INSERT THE FOLLOWING AFTER “(Act No. 27 of 1956)” as amended.

PSA 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES

REPLACE THE HEADING AND THE CONTENTS OF SUBCLAUSE 5.4 WITH THE FOLLOWING:

“PSA 5.4 LOCATION AND PROTECTION OF EXISTING SERVICES

PSA 5.4.1 Location of existing services

Before commencing with any work in an area, the Contractor shall ascertain the presence and actual position of all services which can reasonably be expected by an experienced and competent contractor to be present on, under, over or within the Site.

Without in any way limiting his liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall, in collaboration with the Engineer, obtain the most up-to-date plans as are available, showing the positions of services existing in the area where he intends to work. Neither the Employer not the Engineer offers any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of the Site.

Thereafter, the Contractor shall, by the use of appropriate methodologies, carefully expose the services at such positions as ate agreed to by the Engineer, for the purposes of verifying the exact location and position of the services. Where the exposure of existing services involves excavation to expose underground services, the further requirements of sub clauses 4.4 and 5.1.2.2 of SABS 1200D (as amended) shall apply.

The aforesaid procedure shall also be followed in respect of services not shown on the plans but which may reasonably be anticipated by an experienced Contractor to be present or potentially present on the site.

All services, the positions of which have been determined as aforesaid at the critical points, shall henceforth be designated as “known services” and their positions shall be indicated by the Contractor on a separate set of drawings, a copy of which shall be furnished to the Engineer without delay.

As soon as any service which has not been identified and located as described above is encountered on, under, over or within the site, it shall henceforth be deemed to be a known service and the aforesaid provisions pertaining to locating, verifying and recording its

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

position on the balance of the site shall apply. The Contractor shall notify the Engineer immediately when any such service is encountered or discovered on the Site.

Whilst he is in possession of the Site, the Contractor shall be liable for all loss of or damage as may occur to:

- (a) known services, anywhere along the entire lengths of their routes, as may reasonably be deducted from the actual locations at which their positions were verified as aforesaid, due cognizance being taken of such deviation in line and level which may reasonably be anticipated, and
- (b) any other service which ought reasonably to have been a known service in accordance with the provisions of this clause.

The Contractor shall also be liable for consequential damage in regard to (a) and (b), whether caused directly by the Contractor’s operations or by the lack of proper protection.

No separate payment will be made to the Contractor in respect of his costs of providing, holding available on the Site and utilizing the said detecting and testing equipment, nor for any costs incurred in preparing and submitting to the Engineer the Drawings as aforesaid. These costs shall be deemed included in the Contractor’s other tendered rates and prices included in the Contract.

Payment to the Contractor in respect of exposing services at the positions agreed by the Engineer and as described above will be made under the payment items (if any) as may be provided for in the respective sections of the specifications pertaining to the type of work involved.

PSA 5.4.2 Protection during construction

The Contractor shall take all reasonable precautions and arrange its operations in such a manner as to prevent damage occurring to all known services during the period which the Contractor has occupation and/or possession of the Site.

Services left exposed shall be suitably protected from damage and in such a manner as will eliminate any danger arising therefrom to the public and/or workmen, all in accordance with the requirements of the prevailing legislation and related regulations.

Unless otherwise instructed by the Engineer, no service shall be left exposed after its exact position has been determined and all excavations carried out for the purpose of exposing underground services shall be promptly backfilled and compacted. In roadways, the requirements of sub clause 5.9 of SABS 1200 DB should be observed. In other areas compaction is to be to 90% modified AASHTO density.

PSA 5.4.3 Alterations and repairs to existing services

Unless the contrary is clearly specified in the Contract or ordered by the Engineer, the Contractor shall not carry out alterations to existing services. When any such alterations become necessary, the Contractor shall promptly inform the Engineer, who will either

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

make arrangements for such work to be executed by the owner of the service, or instruct the Contractor to make such arrangement himself.

Should damage occur to any existing services, the Contractor shall immediately inform the Engineer, or when this is not possible, the relevant authority, and obtain instructions as to who should carry out repairs. In urgent cases, the Contractor shall take appropriate steps to minimize damage to and interruption of the service. No repairs of telecommunications cables or electronic power line and cable shall be attempted by the Contractor.

PSA 5.7 SAFETY

REPLACE THE CONTENTS OF SUBCLAUSE 5.7 WITH THE FOLLOWING:

“Pursuant to the provisions of the Conditions of Contract, and without in any way limiting the Contractor’s obligations thereunder, the Contractor shall at his own expense (except only where specific provision (if any) is made in the Contract for the reimbursement to the Contractor in respect of particular items), provide the following:

- (a) provide to its Employees on the site of the works, all safety material, clothing and equipment necessary to ensure full compliance with the provisions of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended (hereinafter referred to as the Act) at all times and shall institute appropriate and effective measures to ensure the proper usage of such safety materials, clothing and equipment at all time.
- (b) Provide , install and maintain all barricades, safety signage and other measures to ensure the safety of workmen and all persons in, on and around the site, as well as the general public;
- (c) Implement on the site of the works, such procedures and systems and keep all records as may be required to ensure compliance with the requirements of the Act at all times;
- (d) Implement all necessary measures so as to ensure compliance with the Act by all subcontractors engaged by the Contractor and their employees engaged on the works;
- (e) Full compliance with all other requirements pertaining to safety as may be specified in the Contract.

The Employer and the Engineer shall be entitled, although not obliged, to make such inspections on the site as they shall deem appropriate, for the purpose of verifying the Contractor’s compliance with the requirements of the Act. For this purpose, the Contractor shall grant full access to the site of all parts of the site and shall co-operate fully in such inspections and shall make available for inspection all such documents and records as the Employer’s and/or Engineer’s representative may reasonably require.

Where any such investigations reveal, or where it comes to the Engineer’s attention that the Contractor is in any way in breach of the requirements of the Act or is failing to comply with the provisions of this clause, the Engineer shall, in accordance with the provisions of Clause 5.11 (GCC 2015) be entitled to suspend progress on the works or any part thereof until such time as the Contractor has demonstrated to the satisfaction of the Engineer, that such breach has been rectified.

The Contractor shall have no grounds for a claim against the Employer for extension of time and/or additional costs if the progress on the works or any part thereof is suspended by the Engineer in terms of this clause, and the Contractor shall remain fully liable in

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

respect of the payment of penalties for late completion in accordance with the provisions of Clause 5.13.1 should the Contractor fail to complete the Works on or before the specified due completion date in consequence of the suspension.

Persistent and repeated breach by the Contractor of the requirements of the Act and/or this clause shall constitute grounds for the Engineer to act in terms of Clause 9.2.1.3.5 and for the Employer to cancel the Contract in accordance with the further provisions of the said Clause 9.2.

ADD THE FOLLOWING SUBCLAUSES TO CLAUSE 5:

PSA 5.9 SITE MEETINGS

The Contractor or his authorize agent will be required to attend regular site meetings, which shall normally be held once a month on dates and at times determined by the Engineer, but in any case whenever reasonably required by the Engineer. Unless otherwise indicated in the Contract or instructed by the Engineer, such meetings shall be held at the Contractor’s offices on the site. At such monthly meetings, matters such as general progress on the works, quality of work, problems, claims, payments, and safety shall be discussed, but not matters concerning the day-to-day running of the Contract.

PSA6 TOLERANCES

ADD THE FOLLOWING SUBCLAUSE TO CLAUSE 6:

“PSA 6.4 USE OF TOLERANCES

No guarantee is given that the full specified tolerances will be available independently of each other, and the Contractor is cautioned that the liberal or full use of any one or more of the tolerances may deprive him of the full or any use of tolerance relating to other aspects of the work.

Except where the contrary is specified, or when clearly not applicable, all quantities for measurement and payment shall be determined from the ‘authorized’ dimensions. These are specified dimensions or those shown on the Drawings or, if changed, as finally prescribed by the Engineer, without any allowance for the specified tolerances. Except if otherwise specified, all measurements for determining quantities for payment will be based on the ‘authorised’ dimensions.

If the work is constructed in accordance with the ‘authorised’ dimensions plus or minus the tolerances allowed, the calculation of quantities will be based on the ‘authorised’ dimensions, regardless of the actual dimensions to which the work has been constructed.

When the work is not constructed in accordance with the ‘authorised’ dimensions plus or minus the tolerances allowed, the Engineer may nevertheless, at his sole discretion, accept the work of payment. In such cases no payment shall be made for quantities of work or material in excess of those calculated for the ‘authorised’ dimensions, and where the actual dimensions are less than the ‘authorised’ dimensions minus the tolerance allowed, quantities for payment shall be calculated based on the actual dimensions as constructed.”

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSA 7 TESTING

PSA 7.1 PRINCIPLES

PSA 7.2 APPROVED LABORATORIES

REPLACE THE CONTENTS OF SUBCLAUSE 7.2 WITH THE FOLLOWING”

“Unless otherwise specified in the relevant specification or elsewhere in the Project Specification, the following shall be deemed to be approved laboratories in which design work, or testing requires in terms of a specification for the purposes of acceptance by the Engineer of the quality of material used and/or workmanship achieved, may be carried out:

- (a) Any testing laboratory certified by the South African Nation Accreditation Systems (SANS) in respect or the nature and type of testing to be undertaken for the purposes of the Contract.
- (b) Any testing laboratory owned, managed or operated by the Employer or the Engineer;
- (c) Any testing laboratory established and operated on the Site by or on behalf of the Employer or the Engineer;
- (d) Any other laboratory that the Engineer approved in his absolute discretion.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.1 MEASUREMENT

PSA 8.1.1 Method of measurement, all sections of the Schedule

PSA 8.1.2 Preliminary and General Item or Section

PSA 8.1.2.1 Contents

REPLACE THE LAST SENTENCE OF SUBCLAUSE 8.1.2.1(b) WITH THE FOLLOWING:

“Separate items will be scheduled to cover the fixed, value-related and time-related components of the Contractor’s preliminary and general costs”

PSA 8.1.2.2 Tendered sums

REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:

“Except only where specific provision is made in the Specifications and/or the Schedule of Quantities for separate compensation for any of these items, the Contractor’s tendered sums under items PSA 8.3 and PSA 8.4 shall collectively cover all charges for:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- Risks, costs and obligations in terms of the Conditions of Contracts and of this standardized specification
- Head-office and site overheads and supervision;
- Profit and financing costs;
- Expenses of a general nature not specifically related to any item or items of the permanent or temporary work;
- Providing such facilities on site as may be required by the Contractor for the proper performance of the Contract and for its personnel, including, but without limitation, providing offices, storage facilities, workshops, ablutions, services such as water, electricity, sewage and rubbish disposal, access roads and all other facilities required, as well as for the maintenance and removal on completion of the works of these facilities and cleaning-up of the site of the Contractors’ establishment and reinstatement to not less than its original condition;
- Providing facilities for the Engineer and his staff as specified in the Contract and their removal from the site on completion of the Contract.

PSA 8.2 PAYMENT

PSA 8.2.1 Fixed-charge and value-related items

REPLACE THE CONTENTS OF SUBCLAUSE 8.2.1 WITH THE FOLLOWING:

PSA 8.2.1.1 Fixed-charge items

“Payment of fixed charges in respect of item 8.3.1 will be made as follows:

- (a) EIGHTY PER CENT (80%) of the sum tendered will be paid when the facilities have been provided and approved;
- (b) The remaining TWENTY PER CENT (20%) will be paid when the works have been completed, facilities have been cleared and cleaned to the satisfaction of the Engineer.

No adjustment will be made to the sum tendered in respect of item 8.3.1 should the value of the works finally executed or the time form completion vary in any way from that specified in the tender.

PSA 8.2.1.2 Value-related items

Payment for the sum tendered under item 8.3.2 will be made in three separate instalments as follows:

- (a) The first installment, which is 40% of the sum, will be paid when the Contractor has fulfilled all his obligations to date under this specification, the General Conditions of Contract and the Contract Data and when the value of work certified for payment, excluding materials on site and payments for preliminary and general items, is equal to not less than 5% of the total value of the work listed in the Schedule of Quantities.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- (b) The second installment, which is 40% of the sum, will be made when the amount certified for payment, including retention moneys but excluding the second installment, exceeds 50% of the tender sum.
- (c) The final payment, which is 20% of the sum, will be made when the works have been certified as completed and the Contractor has fulfilled all his obligations to date under this Specification, the General Conditions of Contract and the Contract of Data (GCC2015)

Should the value of the measured work finally completed be more or less than the tender sum, the sum tendered under item 8.3.2 will be adjusted up or down in accordance with the provisions of Clause 6.11, and this adjustment will be applied to the third instalment.

PSA 8.2.2 Time-related items

REPLACE THE CONTENTS OF SUBCLAUSE 8.2.2 WITH THE FOLLOWING:

“Subject to the provisions of sub clause 8.2.3 and 8.2.4, payment under item 8.4.1 (time-related item) will be made monthly in equal amount, calculated by dividing the sum tendered for the item by the tendered Contract period in months, provided always that the total of the monthly amounts so paid for the item is not out of proportion to value of the progress of the Works as a whole”.

PSA 8.3 SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS

REPLACE THE CONTENTS OF SUBCLAUSE 8.3.1 WITH THE FOLLOWING:

PSA 8.3.1 Fixed preliminary and general charges.....Unit: sum

The sums tendered shall include full compensation for all fixed-charged preliminary and general charges as described in sub clause PSA 8.1.2.2. Payment will be made as described in sub clause PSA 8.2.1.1

PSA 8.3.2 Value-related preliminary and general charges.....Unit: sum

The sum tendered shall include full compensation for all value-related preliminary and general charges as described in sub clause PSA 8.1.2.2. Payment will be made as described in sub clause PSA 8.2.1.2

PSA 8.4 SCHEDULED TIME-RELATED ITEMS

REPLACE THE CONTENTS OF SUBCLAUSE 8.4 WITH THE FOLLOWING:

PSA 8.4.1 Time-related preliminary and general charges.....Unit: sum

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

The sum tendered shall include full compensation for all time-related preliminary and general charges as described in sub clause PSA 8.1.2.2. Payment will be made as described in sub clause PSA 8.2.2

PSA 8.5 SUMS STATED PROVISIONALLY BY THE ENGINEER

PSA 8.5.2 Works executed by Nominated Subcontractors

(a) Work to be executed by a Nominated Subcontractors.....Unit: Prov Sum

(b) Overheads , charges and profit on item (a) above.....Unit:% or sum

Sub items (a) and (b) will be provided in the Schedule of Quantities for each different Nominated Subcontract included in the Contract.

The Contractors be reimbursed under sub item (a), in substitution of the respective Provisional Sums (if any) allowed in the Schedule of Quantities, the amounts actually paid or payable by the Contractor to the respective Nominated Subcontractors, in accordance with the provisions of Clause 6.6

The Contractor shall be paid under sub item (b), either:

- (a) Where the unit of sub item (b) was specified as being a percentage, the respective percentage, as stated by the Contractor in is tender, of the amount certified by the Engineer for payment under the related sub item (a), all in accordance with the provisions of Clause 6.6.1.2.1 or
- (b) Where the unit of measurement for sub item (b) was specified as being a lump sum, an amount which is in the same proportion to the amount certified for payment under sub item (a) and the tendered lump sum is to the amount to the Provisional Sum stated under sub item (a) in accordance with the provisions of Sub- Clause 6.6.1.2.2 (GCC 2015)

Provided always that where the Contractor has failed for any reason to insert a percentage or sum (as applicable) for sub item (b) in tis tender, or where no provision was made in the tender documents for tenders to make any such entry, the Contractor will be paid an amount equal to SEVEN AND ON HALF PER CENT (7.5%) of the amount actually certified by the Engineer for payment under sub item (a).

The percentage or sum (as applicable) paid under sub item (b) as aforesaid, shall be deemed to include for full and final compensation to the Contractor for all costs as may be incurred and all charges and profits associated with the engagement, supervision, administration and management of the Nominated Subcontractor required of him in fulfilling its obligations under the Contract as the Principal Contractor.

PSA 8.6 PRIME COST ITEMS

REPLACE SUBCLAUSE 8.6 WITH THE FOLLOWING:

PSA 8.6 PRIME COST SUMS

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (a) Description of item to which Prime Cost Sum applies.....Unit: PC Sum
- (b) Charge required by Contractor on sub item (a) above..... Unit: %

Sub items (a) and (b) will be provided in the Schedule of Quantities for each different item to which a Prime Cost Sum applies.

The Contractor shall be reimbursed under sub item(s) (a) in substitution of the respective Prime Cost Sums included in the Contract, the actual price(s) paid or payable by him in respect of goods, materials or services supplied, but excluding any charges for the Contractor’s labour, profit, carriage, establishment or other charges related to such goods, services or materials.

The Contractor shall be paid under sub item (b), the respective percentage, as stated by the Contractor in his tender, of amount certified by the Engineer for payment under the related sub item (a). The percentages tendered by the Contractor for each respective sub item (b) included in the Schedule of Quantities shall be deemed to be in full and final compensation to the Contractor in respect of any charge by the Contractor for labour, carriage profit, establishment and for any other charges related to the goods, services or materials supplied under the related sub item (a).

If the Contractor shall have omitted within his tender to insert a tendered percentage under sub item (b), or tendered a zero percentage, the Contractor’s tendered rate for sub item (b) shall be deemed to be zero and the Contractor shall not be entitled to any payment under sub item (b).

Note in connection with additional tests required by the Engineer:

When a PC sum is included in the Schedule of Quantities for additional tests required by the Engineer, the Contractor shall be responsible for both the cost of normal testing as described in C3.4.2.5(b) of the Project Specifications and for the cost of any additional test that indicates that the specifications have not been compiled with.

PSA 8.10 COMPLIANCE WITH OHS ACT AND REGULATIONS (INCLUDING THE CONSTRUCTION REGULATIONS 2014).....Unit: sum

The tendered sum shall include full compensation to the Contractor for compliance with all the requirements of the OHS Act and Regulations (including the Construction Regulations 2014) at all times for the full duration of the Contract, as described in C3.6.1. The successful tender shall provide the Engineer with a complete breakdown of this tendered sum.

This sum will be paid to the Contractor in equal monthly amounts subject to proper/substantial compliance.

PSC SITE CLEARANCE

PSC 3 MATERIALS

PSC 3.1 DISPOSAL OF MATERIAL

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

ADD THE FOLLOWING:

“The Contractor shall obtain his own dumping site for the disposal of material and all transport costs shall be included in the rated tendered for site clearance.”

PSC 5 CONSTRUCTION

PSC 5.1 AREAS TO BE CLEARED AND GRUBBED

ADD THE FOLLOWING:

“Pipeline routes shall be cleared to a distance of 1.5m on both sides of the pipeline centre line. Route pegs or makers shall not be destroyed or damaged during clearing operations.”

PSC 5.2 CUTTING OF TREES

PSC 5.2.3 Preservation of trees

PSC 5.2.3.2 Individual trees

REPLACE THE LAST SENTENCE WITH THE FOLLOWING:

“An amount of R500.00 will be deducted from moneys due to the Contractor as a penalty for every tree that is damaged or removed unnecessarily.”

PSC 5.5 RECLEARING OF VEGETATION

ADD THE FOLLOWING:

“When areas have to be re-cleared on the written instructions of the Engineer, such re-clearing shall be carried out at the Contractor’s own cost and the Contractor is therefore advised not to clear the areas too soon”

PSC 8 MEASUREMENT AND PAYMENT

PSC 8.2 PAYMENT

PSC8.2.1 Clear and grub

REPLACE THE FIRST LINE WITH THE FOLLOWING:

“The area designated by the Engineer to be cleared and grubbed will be measured in square metre to the nearest square metre or,”

PSC 8.2.11 Take down and re-erect existing fences.....Unit: m

The rate shall cover the cost of taking down the fences, coiling wire, sorting, stacking and guarding all materials, the cost of loading, transporting and off-loading such materials, the cost of re-erecting the fence in its original position using the dismantled material, the cost of temporary bracing of the fencing sections not taken down and the cost of appurtenant

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

materials that may be required to restore the fence to its original condition before dismantling.

PSC 8.2.12 Remove topsoil to soil furnished by Contractor.....Unit: m³

The tendered rate shall include full compensation for removing topsoil to a depth of 150mm and for loading and transporting the material to spoil sites furnished by the Contractor.

PSD EARTHWORKS

PSD2 INTERPRETATIONS

PSD 2.1 SUPPORTING SPECIFICATIONS

REPLACE THE WORD AND THE DENFINITION FOR “BORROW” WITH THE FOLLOWING:

“**Borrow material:** Material, other than material obtained from excavations required for the works, obtained for sources such as borrow pits or the authorized widening of excavations. ‘Borrow’ shall have a corresponding meaning”

REPLACE THE DEFINITION FOR “specified density” WITH THE FOLLOWING:

“**specified density**”: The specified dry density expressed as a percentage of modified AASHTO dry density”

REPLACE THE DEFINITION FOR “stockpile” WITH THE FOLLOWING:

“**Stockpile**”(verb): The process of selecting and, when necessary, loading, transporting and off-loading material in a designated area for later use for a specific purpose”

ADD THE FOLLOWING DEFINITIONS:

Commercial source: A source of material provided by the Contractor, not the Employer and including any borrow pit, provided by the Contractor.

Fill: An embarked or terrace constructed of material obtained from excavations or borrow pit. In roads it includes the earthworks up to the underside of the selected subgrade level.

Fill (material): Material used for the construction of an embankment to terrace.

Roadbed: The natural in situ material on which the fill or, in the absence of fill, the pavement layers are constructed.

PSD 3 MATERIALS

PSD 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

PSD3.1.1 Method of classifying

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ADD THE FOLLOWING:

The classification of material other than ‘soft excavation’ shall be agreed upon before excavation may commence.

The Contractor shall immediately inform the Engineer if and when the nature of the material being excavated changes to such an extent that a new classification is warranted for further excavation. Failure on the part of the Contractor to advise the Engineer in good time shall entitle the Engineer to reclassify, at his discretion such excavated material.

PSD 3.2.3 Material suitable for backfill or fill against structure

REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:

Material used for backfill behind structures shall generally be the material excavated, subject to the following conditions:

- (a) The material shall not contain an excessive number of stones retained on a 50mm sieve;
- (b) The material shall not contain large clay lumps that do not break up under the action of the compaction equipment; and
- (c) The liquid limit of the material shall not exceed 40, neither shall the PI exceed 18”

PSD4 PLANT

PSD 4.4 DETECTORS

REPLACE THE CONTENTS OF SUBCLAUSE 4.4 WITH THE FOLLOWING:

The Contractor shall, for the purposes of detecting and locating underground services in accordance with the provisions of sub clause 5.4 of SABS 1200A and sub clause 5.1.2 of SABS 1200D, at his own cost, provide and use detecting equipment which is suitable for the detection of underground cables and pipes.

PSD5 CONSTRUCTION

PSD 5.1 PRECAUTIONS

PSD 5.1.1 Safety

PSD 5.1.1.1 Barricading and lighting

REPLACE “Machinery and Occupational Safety Act, 1983 (Act 6 of 1983) WITH “Occupational Health and Safety Act,1993 (Act 85 of 1993)

PSD 5.1.1.2 Safeguarding of excavation

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

REPLACE “Machinery and Occupational Safety Act” WITH “Occupational Health and Safety Act, 1993 (Act 85 of 1993)

PSD 5.1.1.3 Explosives

REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:
The use of explosives is prohibited on this project.

PSD 5.1.2 Existing services

PSD 5.1.2.2 Detection, location and exposure

REPLACE THE CONTENTS OF SUBCLAUSE 5.1.2.2 WITH THE FOLLOWING:

The exposure by the Contractor of underground services, as required in terms of sub clause 5.4 of SABS 1200A (as amended) shall be carried out by careful hand excavation at such positions and to such dimensions as agreed to by the Engineer.

Unless otherwise instructed or agreed by the Engineer, no service shall be left exposed after its exact position has been determined and all excavations carried out for the purposes of exposing underground services shall be promptly backfilled and compacted to the following densities:

- (a) In roadways: 93% Mod AASHTO density; and
- (b) In all other area: 90% Mod AASHTO density.

Where hand excavations to expose underground services have to be carried out in roadways, the Contractor shall reinstate the road layer works in accordance with the provisions of sub clause 5.9 of SABS 1200DB.

Payment in respect of exposing the services by means of hand excavation as described above, will be made in accordance with sub clause PSD 8.3.8.1.

Payment in respect of reinstating the layer works in roadways will be made in accordance with sub clause 8.3.6.1 of SABS1200DB (as amended).

PSD 5.1.2.3 Protection of cables

REPLACE SUBCLAUSE 5.1.2.3 WITH THE FOLLOWING:

5.1.2.3 Protection during construction

Further to the requirements of sub clause 5.4.2 of SABS 1200A (as amended), major excavating equipment and other plant shall not be operated dangerously close to known services. Where necessary, excavation in close proximity to known services shall be carefully carried out with suitable hand tools, excluding picks wherever their use could damage the services. No additional payment will apply to such more difficult work.

Should any service not being a known service be discovered or encountered during the course of the Contract, the Contractor shall, in addition to complying with the requirements

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

of sub clause 5.4.2 of SABS 1200A (as amended), immediately notify the Engineer thereof and implement such measures as will prevent damage of such service or, if it was damaged in the course of discovery, will prevent and minimize the occurrence of any further damage occurring.

PSD 5.1.2.4 Negligence

DELETE SUBCLAUSE 5.1.2.4

PSD 5.1.3 Stormwater and groundwater

ADD THE FOLLOWING

The Contractor shall, where applicable and at the earliest practicable opportunity, install the permanent drainage specified or shown on the Drawings and shall at his own cost provide the temporary drainage required to protect the works.

PSD 5.1.5 Reinstatement and maintenance of roads

ADD THE FOLLOWING:

Where crossings have been made, roads shall be reinstated in accordance with the details specified in sub clause 5.9 of SABS 1200 DB.

PSD 5.1.6 Road traffic control

DELETE THE SECOND SENTENCE OF SUBCLAUSE 5.1.6

PSD 5.2 METHODS AND PROCEDURES

PSD 5.2.2 Excavation

PSD 5.2.2.1 Excavation for general earthwork and for structures

ADD THE FOLLOWING TO PARAGRAPH (b)

When the nature of the material precludes the above procedure, additional excavations shall be carried out to provide working space for the erection of formwork. The tendered rate for item 8.3.5 will be deemed to include the cost of a working width of 600mm, but the Contractor may excavate a greater width at no additional cost to the Employer.

REPLACE THE FIRST SENTENCE OF PARAGRAPH (e) WITH THE FOLLOWING:

Where excavations have been carried below the authorized levels, the Contractor shall backfill such excavations to the correct level with approved gravel compacted to 90% of modified AASHTO density or to the density of the surrounding material, whichever is the higher density.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Where excavations for structures have been carried out hard material, the Engineer may direct that over-excavation be backfilled with weak concrete if there is a danger of settlement or differential settlement of the foundations.

Where the sides of excavations against which concrete is to be cast have been over-excavated or have collapsed partially, the Contractor shall re-trim the excavations if necessary and unless other remedial measures are agreed to by the Engineer, shall cast the concrete for structure, including the additional concrete that may be required as a result of the over-excavation or partial collapse. The cost of the additional concrete or remedial measures shall be for the Contractor’s account.

PSD 5.2.2.3 Disposal

REPLACE THE SECOND SENTENCE WITH THE FOLLOWING:

The Contractor shall provide all necessary spoil sites for the spoiling of all surplus and unsuitable materials and shall make the necessary arrangements with the owner of the site where the material is disposed of and pay all charges and levies as may be applicable for the use of such spoil site.

Payment to the Contractor in respect of locating and making arrangements for suitable spoil sites and spoiling material at the such site will be made in accordance with the provisions of sub clause PSD 8.3.15

ADD THE FOLLOWING SUBCLAUSE IN SUBCLAUSE 5.2.2:

PSD 5.2.2.4 Selection and stockpiling

Approval or designation of the material in a particular borrow pit or excavation for particular purpose does not imply that all the material in the borrow pit or excavation is suitable for the particular purpose to which the said approval or designation relates, nor that all material in the borrow pit or source should be used for the particular purpose. The Contractor shall select suitable material from that borrow pit or source discard unsuitable material and reserve material for other purposes as necessary.

The Contractor shall organize and carry out his operations in such a manner as will prevent the contamination of suitable embankment and backfill material with unsuitable materials. Any excavated material which becomes, in the Engineer’s opinion, unsuitable for use in embankments or backfill as a result of contamination, shall be disposed of in a manner acceptable to the Engineer and shall be replace by the Contractor with materials acceptable to the Engineer, all at the Contractor’s cost.

When required, or when ordered by the Engineer material shall be stockpiled for later use. The additional costs for stockpiling material shall be paid to the Contractor in accordance with the provisions of sub clause PSD 8.3.14.

PSD5.2.5 Transport for earthworks

ADD THE FOLLOWING NEW SUBCLAUSE TO CLAUSE 5.2.5

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PSD 5.2.5.3 Special cases relating to overhaul

- (a) When material is excavated and stockpiled on the Engineer’s instructions before being reloaded and transported to its point of final use, free-haul shall apply twice, firstly from the point of excavation to stockpile and secondly from stockpile to the point of final use (see sub clause PSD8.3.14).

PSD 7 TESTING

PSD 7.2 TAKING AND TESTING OF SAMPLES

REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:

The Contractor shall arrange with the approved independent laboratory engaged by the Contractor in terms of C3.4.2.5(b) sub clause PS8.2.1 of the Project Specifications 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 approved by him.

The compaction requirements for fills shall be deemed complied with when at least 75% of the dry-density tests on any lot show values equal to or above the specified density and when no single value is more than five percentage points below the specified value.

PSD 8 MEASUREMENT AND PAYMENT

PSD 8.3 SCHEDULED ITEMS

PSD 8.3.1 Site preparation

REPLACE SUBCLAUSES 8.3.1 AND 8.3.1.2 WITH THE FOLLOWING:

Where site preparation such as clearing, grubbing, the removal of large trees or the removal and stockpiling of topsoil is required, the provisions and scheduled items of SABS 1200 C shall apply.

PSD 8.3.2 Bulk excavation

REPLACE THE CONTENTS OF ITEM WITH THE FOLLOWING:

- (a) **Excavate in all materials and use for embankment or backfill as ordered from:**

(1) Necessary excavations Unit: m³

(2) Designated borrow pits.....Unit: m³

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(3) Commercial sources Unit: m³

The unit of measurement shall be the cubic metre measured in place in accordance with sub clause 8.2 of SABS1200D.

Separate items will be scheduled for embankments and backfills for different parts of the works.

The tendered rates shall cover the cost of complying with all the precautions required in terms of sub clause 5.1of SABS 1200D (as amended), in addition to the cost excavating in all material, basic selecting, loading, transporting within the applicable free-haul distance, off-loading, spreading or backfilling, watering, compacting, final grading, complying with the requirements for tolerances, providing for testing, finishing and tidying, all in accordance with the specifications.

In addition to the a foregoing, the tendered rate for sub item (b) shall further include for the costs of royalties (if applicable), whilst the tendered rate for sub item (c) shall also include for the costs of finding a source of suitable material, for making arrangements with the owner of the source, for procuring the material, for the payment of all requisite royalties, charges or damages, and for transporting the material to the site regardless of the distance involved. No payment will be made for the removal of overburden of stockpiling at the commercial source and no extra over payment shall apply for excavating in intermediate, hard or boulder material.

(b) **Excavate in all materials and dispose**.....Unit: m³

The unit of measurement shall be the cubic metre of material excavated, measured in place in accordance with sub clause 8.2 of SABS1200D.

The tendered rates shall cover the cost of complying with all the precautions required in terms of sub clause 5.1 of SABS 1200D (as amended), in addition to the cost of excavating, basic selecting, loading, transporting within the applicable free-haul distance, off-loading at the spoil site, maintaining and finishing the spoil site, all in accordance with the specifications.

(c) **Extra over sub items PSD 8.3.2(a)(1) PSD 8.3.2.(a)(2) and PSD 8.3.2(B) for:**

- (1) Intermediate excavation Unit: m³
- (2) Hard rock excavation Unit: m³
- (3) Boulder excavation, Class A..... Unit: m³
- (4) Boulder excavation, Class B..... Unit: m³

The rate shall cover the additional cost of the operations enumerated in sub clauses 8.3.2(a) and 8.3.2(b) above for any portion of the excavation that is classified as intermediate, hard rock, boulder excavation class A or boulder excavation class B as applicable. (See Drawing D-2)

PSD 8.3.4 Importing of materials

DELETE SUBITEM (a) OF 8.3.4

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSD 8.3.6 Overhaul

ADD THE FOLLOWING:

No overhaul shall apply to material from commercial sources or to material disposed of on sites provided by the Contractors or disposed of by other means employed by the Contractors.

PSD 8.3.8 Existing services

PSD 8.3.8.1 Location

REPLACE ITEM 8.3.8.1 WITH THE FOLLOWING:

8.3.8.1 Hand excavation for locating and exposing existing services:

- (a) In roadwaysUnit: m³
- (b) In all other areas.....Unit: m³

The unit of measurement shall be the cubic metre of material excavated, measured in place according to the authorized or actual dimensions of the excavation, whichever is lesser.

The tendered rates shall cover the cost of excavating in all materials by means of hand tools within the requirements of sub clause PSA 5.4.1 for all precautionary measured necessary to protect to service form damage during excavation and backfilling, and for subsequent backfilling and compacting. Compaction of material in all areas except in roadways shall be to 90% of the modified AASHTO density.

The tendered rate for hand excavation in roadways shall include compensation for compacting excavated or selected backfill material to 93% of modified AASHTO density. Reinstating layer works and surfacing shall be measured and paid for in term of SABS 1200 DB.

The tendered rates shall also include for keeping excavations safe, for dealing with surface and subsurface water, for removing surplus excavated material from the site, for transporting all material within the free-haul distance, and for supplying adequate supervision during both excavation and backfilling operations. Overhaul, if applicable, will be measured and paid for in terms of SABS 1200 DB.

PSDB EARTHWORKS (PIPE TRENCHES)

PSDB 3 MATERIALS

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSDB 3.5 BACKFILL MATERIALS

ADD THE FOLLOWING PARAGRAPHS TO SUBCLAUSE 3.5:

(c) Cement-stabilized backfilling

Backfilling shall, where directed by the Engineer, be stabilized with 5% cement. The aggregate shall consist of approved soil or gravel containing stones not bigger than 38mm and with a plasticity index not exceeding 10.

The soil or gravel shall be mixed with 5% cement and shall be compacted in layers of 100mm thick to 90% of modified AASHTO density.

(d) Soilcrete backfilling

The aggregate for soilcrete shall be mixed with 5% cement and shall consist of approved soil or gravel containing stones not bigger than 38mm and with a plasticity index not exceeding 10.

The soil or gravel shall be mixed in a concrete mixer with the cement and enough water to acquire a consistency that allows the mixture to be place with vibrators to fill voids between the pipe and the sides of the trench. Shuttering shall be used where necessary.

PSDB 3.7 SELECTION

REPLACE THE WORDS “if he so wishes” IN THE FISRT LINE OF THER SECOND PARAGRAPH WITH THE WORDS “at his own cost”

PSDB 5 CONSTRUCTION

PSDB 5.1 PRECAUTIONS

PSDB 5.1.3 Accommodation of traffic and access to properties

REPLACE THE SEMICOLON AND THE WORD “and” AT THE END OF SUBCLAUSE 5.1.3(a) WITH A FULL STOP AND REPLACE ITEME (b) WITH THE FOLLOWING:

(b) Where necessary to achieve compliance by the Contractor with his obligations in terms of sub clause C3.4.2.5(f) Scope of Works to provide and maintain pedestrian and vehicular access to properties affected by the works, the Contractors shall construct and maintain to the satisfaction of the Engineer, such temporary access roads around and/or steel or timber bridges over excavations in roads, pavements, entrances or accesses to properties.

Temporary pedestrian access bridges shall be at least 1,2m wide and temporary access bridges for vehicles shall be at least 3.6m wide. All temporary access bridges shall be fitted with handrails as well as protective mesh fencing on both sides.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

On completion of the work, the Contractor shall dismantle and remove all such temporary constructions and reinstate these areas to their former condition.

Except only where the Engineer has included in the Schedule of Quantities, particular payment items specifically therefor, the Contractor will not be paid directly for the construction and maintenance of temporary access roads and/or the provision and maintenance of bridges as aforementioned and the costs thereof shall be deemed included in the Contractor’s tendered rates for excavation.

ADD THE FOLLOWING NEW SUBCLAUSE TO SUBCLAUSE 5.1

PSDB 5.1.5 Removal of existing pipelines

Where existing pipes have to be removed, they shall be carefully opened up by machine excavation to 300mm above the pipes after which the whole pipe shall be fully exposed by means of hand excavation. The excavation width shall comply with sub clause 8.2.3.

The pipes shall be removed from the trench in a manner approved by the Engineer and brought to the surface for inspection by the Engineer.

Pipes that are declared suitable for reuse and pipes declared unfit for reuse shall be dealt with in an applicable manner described in the specifications, or on the Drawings or on the Engineer’s instructions as relevant.

PSDB 5.4 EXCAVATION

ADD THE FOLLOWING:

Except where otherwise specified, trenches shall be of such a depth that the minimum cover over the pipes shall be 700mm except at road- crossings where minimum cover shall be 1000mm.

PSDB 5.6 BACKFILL

PSDB 5.6.3 Disposal of soft excavation material

REPLACE THE WORDS “unless otherwise required in the project specification” AT THE END OF THE SUBCLUASE 5.6.3 WHITH:

“...or to spoil in accordance with the requirements of sub clause PSD 5.2.2.3 as instructed by the Engineer”

PSDB 8 MEASUREMENT AND PAYMENT

PSDB 8 SCHEDULED ITEMS

PSDB 8.3.2 Excavation

(a) Excavate in all materials for trenches, backfill compact and dispose of surplus material

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

REPLACE “of 1,0m” IN THE FISRT SENTENCE OF 8.3.2(a) WITH:
‘as specified in the Schedule of Quantities”

(b) Extra over item (a) above for:

ADD THE FOLLOWING AT THE END OF THE EXISTING SUBITEM 2:

“No payments will be made under sub items (1) and (2) in respect of any material measured and paid for under sub item 3 below”

AND ADD THE FOLLOWING NEW SUBITEMS IN 8.3.2(b):

“(3) **Hand excavation where ordered by the Engineer in:**

- (a) Soft material Unit: m³
- (b) Intermediate material Unit: m³
- (c) Hard materialUnit: m³

The unit measurement shall be the cubic metre of material, measured in place according to the authorized dimensions, which was excavated by hand on the specific prior written instructions of the Engineer; provided always that the Engineers said instruction shall have stated that measurement and payment for such hand excavation will be in accordance with this item.

The tendered rate shall include full compensation for the additional cost, effort and time resulting from excavating in the respective materials using hand methods only.

The Engineer shall not be obliged to authorize payment under this items in respect of any hand excavation carried out (whether ordered in writing or otherwise), which hand excavation was in any case necessary to achieve compliance by the Contractor with his obligations under the Contract to:

- (i) utilize construction appropriate to the nature of the specific parts of the works; and/or
- (ii) protect existing structures and/or services; and/or
- (iii) Comply with all prevailing legislation and regulations

(4) **Backfill stabilized with 5% cement where directed by the Engineer....Unit: m³**

The unit of measurement shall be the cubic metre of backfill material, measured in place after compaction according to the authorized dimensions, which was stabilized on the Engineers instruction in accordance with sub clause PSDB3.5(c).

The tendered rate shall include full compensation for supplying the cement and for selecting, mixing, backfilling and compacting the stabilized material to 90% of modified AASHTO density.

(5) **Soilcrete backfill where directed by the Engineer.....Unit: m³**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

The unit of measurement shall be the cubic metre of soilcrete placed on the Engineer’s instructions in accordance with sub clause PSDB 3.5(d), measured in place according to the authorized dimensions.

The tendered rate shall include full compensation for supplying the cement and for selecting, mixing and placing the soilcrete as well as for the cost of shuttering if required.

ADD THE FOLLOWING SUBITEMS IN 8.3.2 AFTER SUBITEM 8.3.2(C):

‘(d) **Excavate in all materials for stormwater inlet and outlet structures and for manholes, catch pits, valves chambers and the like, irrespective of depth and backfill around structures**

.....Unit: m³

The unit of measurement shall be the cubic metre of material excavated, measured in place according to the authorized dimensions, and excluding the volume of material excavated and paid for under sub item (a).

The tendered rate shall include for the costs of excavating in all materials, backfilling, compacting, trimming and tidying the final surface around the structure, disposing of surplus and unsuitable materials within the free-haul distance and where applicable, selecting and keeping separate ,excavated material suitable for use of backfill.

‘(f) **Extra over sub items (d) and (e) for excavating in**

(1) Intermediate material.....Unit: m³

(2) Hard rock material.....Unit: m³

Measurement and payment shall be in accordance with the previsions of 8.3.2(b) of SABS 1200D (as amended).

PSDM EARTHWORKS (ROADS, SUBGRADE)

PSDM 3 MATERIALS

PSDM 3.2 CLASSIFICATION FOR PLACING PURPOSES

PSDM 3.2.3 Selected layer

REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:

“The following requirements shall apply in respect of the selected layer:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

(a) Maximum particle size: 60% of compacted layer thickness

(b) Unstabilised selected layer

 (i) Upper selected layer

 Minimum CBR at 93% of modified AASHTO density: 15

 Maximum PI: 12 (the Engineer has the right to alter this requirement to 3 x the grading modulus + 10)

 (ii) Lower selected layer

 Minimum CBR at 90% of modified AASHTO density:7

 Maximum PI: 12 (the Engineer has the right to alter this requirement to 3 x the grading modulus +10)

(c) Stabilized selected layer

 Minimum grading modulus of natural material: 0.75

 UCS of stabilized material 300kPa – 500kPa at 93% of modified AASHTO density

 Maximum PI for stabilized material: 10

PSDM5 CONSTRUCTION

PSDM 5.2 METHODS AND PROCEDURES

PSDM 5.2.2 Cut and borrow

PSDM 5.2.2.3 Use of material

ADD THE FOLLOWING PARAGRAPH:

 (e) Commercial sources

 The provisions of sub clause PSD 5.2.2.5 of SABS 1200D as amended shall apply.

PSDM 5.2.2.6 Catchwater mounds and channels and mitre banks and channels

ADD THE FOLLOWING SENTENCE:

PSDM 5.2.3 Treatment of the road-bed

PSDM 5.2.3.2 Removal of unsuitable ground

REPLACE THE SECOND SENTENCE OF PARAGRAPH (a) WITH THE FOLLOWING:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

“The excavated space shall then be backfilled with approved imported material compacted to the required density.

ADD THE FOLLOWING SENTENCE TO PARAGRAPH (b):

“Unsuitable excavated material will be paid for as cut to spoil”

PSDM5.2.3.3 Treatment of road-bed

ADD THE FOLLOWING PARAGRAPH:

(c) three-pass roller compaction

Any portion of the roadbed that is shown on the Drawings or is specified or is directed by the Engineer to be given three-pass roller compaction because of its inadequate natural density, shall be prepared by shaping where necessary and compacting with a roller, complying with the requirements specified below.

Compaction shall comprise three complete coverage by the wheels of the specified roller over every portion of the area that is being compacted. While it is not the intention that the Contractor should apply water to the roadbed for this type of compaction, the Contractor shall nevertheless satisfy the Engineer that everything is being done to take full advantage of favourable soil moisture conditions during the rainy season, and that such compaction is as far as possible carried out when the roadbed is neither excessively dry not excessively wet.

The Engineer has the authority to decide when conditions are favourable for compaction and where such compaction is to be carried out at any particular time, and he has the right to instruct the Contractor to water the roadbed at the Contractor’s expense when, in the opinion of the Engineer, the Contractor failed, neglected or refused to comply with these requirements.

The rollers to be used for roller-pass compaction shall conform to the following requirements:

Grid roller: The grid roller shall have a mass of not less than 13.5t when ballasted, shall be loaded to this mass if required, and shall be moved at a speed of not less than 12km/h.

Vibratory roller: The vibratory roller shall be capable of exerting a combined static and dynamic force of not less than 120kN/m width for every meter of loose-layer thickness at an operating frequency not exceeding 25Hz and shall move at a speed not exceeding 4km/h.

PSDM 5.2.4 FILL

PSDM 5.2.4.3 Finishing

(e) Topsoil

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

REPLACE THE SECOND SENTENCE WITH THE FOLLOWING:

“The thickness of the topsoil shall be as directed by the Engineer”

PSDM 5.2.5 Selected layer

REPLACE THE CONTENT OF THIS SUBCLAUSE WITH THE FOLLOWING:

“Except with regard to density, the requirements of sub clause 5.2.4 shall apply. The degree of compaction shall be:

Upper selected*

Selected * : 93% of modified AASHTO density

PSDM 5.2.6 Gravel surfacing

REPLACE THE THIRD SENTENCE OF THIS SUBCLAUSE WITH THE FOLLOWING:

“The relevant requirements in sub clause 5.2.4.2. shall apply, except that the material shall be compacted to 93% of modified AASHTO density.”

PSDM5.2.8 Transport

REPLACE THE CONTENT OF THIS SUBCLAUSE WITH THE FOLLOWING:

The provisions of sub clause PSD 5.2.5 of SABS 1200D, as amended, shall apply.

PSDM7 TESTING

PSDM7.3 ROUTINE INSPECTION AND TESTING

REPLACE TABLE 2 AND THE CONTENTS OF SUBCLAUSE 7.3.2 WITH THE FOLLOWING:

PSDM 7.3.2 The dry requirements for a particular lot of selected layer or wearing course shall be deemed to be satisfied if the average density and the results of individual tests meet the requirements specified in table 2 below. Refer to sub clause PSD 7.2 for the requirements for fill.

TABLE 2- DENSITIES

1	2	3	4	5
Layer	Specified density (%of modified AASHTO density)	Number of tests per lot	Average density %	Minimum density for any single test, %

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Gravel wearing course	93	3 and 4	93.1	89.4
		5	93.4	89.2
		6	93.6	89.0
Selected layer	90	3 and 4	90.1	86.4
		5	90.4	86.2
		6	90.6	86.0

PSDM8 MEASUREMENT AND PAYMENT

PSDM 8.2 COMPUTAION OF QUANTITIES

REPLACE SUBCLAUSE 8.2.1 TO 8.2.3 (INCLUSIVE) WITH THE FOLLOWING:

PSDM 8.2.1 The provisions of sub clause 8.2.1 of SABS 1200D shall apply

PSDM 8.2.2 The provisions of sub clause 8.2.2 of SABS 1200D shall apply

PSDM 8.2.3 The provisions of sub clause 8.2.3 of SABS 1200D shall apply

PSDM 8.2.5 Verifying quantities

REPLACE THE FIRST SENTENCE WITH THE FOLLOWING:

Before any earthworks are commenced but after completion of any site preparation, the Engineer will upon a written request from the Contractor, provide cross-sections for the purpose of measurement of earthworks quantities.

PSDM 8.3 SCHEDULED ITEMS

PSDM 8.3.3 Treatment of roadbed

(a) Roadbed preparation and compaction of material to

ADD THE FOLLOWING:

The unit measurement shall be the cubic meter of material re-compacted as specified and the volume shall be determined from leveled cross-sections on which are superimposed the levels to which the roadbed is to be constructed. When material is imported to make up the required volume, such material will be paid for ad cut or borrow to fill as relevant.

ADD THE FOLLOWING:

‘(c) **three-pas roller compaction:**

‘(i) Grid roller.....Unit: m³

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

'(ii) VibratoryUnit: m³

The units of measurement shall be the square metre of roadbed compacted as specified in sub clause PSDM5.2.3 (c) for the areas designated by the Engineer.

The tendered rates shall include compensation for shaping the area, providing the rollers and compacting the roadbed by means of three roller passes over the entire area.

PSDM 8.3.7 Cut to spoil or stockpile from

REPLACE THE HEADING WITH THE FOLLOWING:

PSDM 8.3.7 Cut to spoil from

PSDM 8.3.12 Overhaul

REPLACE THIS ITEM WITH THE FOLLOWING:

PSDM 8.3.18 Final finishing and cleaning up of the site of the works.....Unit: sum

The tendered sum shall include full compensation for the clearing, disposal of material, finishing, tidying and all other work required to finish and clean up the Site of the works and affected areas by removing excess earth, stones, boulders, debris and other waste material, by clearing stormwater inlets and outlets and pipe barrels, by cleaning the surfacing of all dirt, mud and foreign material and by neatly finishing off all junctions, intersections and kerbing.

All material resulting from finishing operations shall be disposed of to a spoil site furnished by the Contractor.

The tendered rate shall make provision for the reinstatement of existing driveways to their original condition where these have been affected by the works, as these items will not be measured and paid separately.

PSDM 8.3.19 Sidewalks:

(a) Fill compacted to 90% of modified AASHTO density and obtained from:

- '(i) Designated borrow pits.....Unit: m³
- '(ii) Commercial sourcesUnit: m³
- '(iii) Excavations.....Unit: m³

(b) In-situ material scarified to a depth of 150mm and Compacted to 90%of modified AASHTO density.....Unit: m³

(c) Excavated material removed to spoil.....Unit: m³

The tendered rates shall include full compensation for constructing the sidewalks to the profiles indicated either on the Drawings or by the Engineer, for working in

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

restricted areas, for using material classified as soft material with a maximum particle size of 60mm, and for carrying out the work in accordance with the Specifications.

PSG CONCRETE

PSG3 MATERIALS

PSG3.2 CEMENT

PSG3.2.2 Alternative types of cement

REPLACE THE CONTENT OF THIS SUBCLAUSE WITH THE FOLLOWING:

Only CEM 1 42,5 (Portland cement) or CEM II/A-V 42,5 (Portland fly ash cement) according to (SAN 50197-1), may be used. The cement may not consist of more than 20% siliceous fly ash blended with OPC (Ordinary Portland Cement). Should the Contractor wish to use any other type of cement, he shall obtain the Engineer’s prior written approval (see 8.1.3.2 and 8.1.3.3).

PSG 3.2.3 Storage of cement

ADD THE FOLLOWING:

Cement shall not be stored for longer than 12 weeks without the Engineer’s permission.

PSG3.4 AGGREGATES

PSG 3.4.3 Storage of aggregates

ADD THE FOLLOWING:

When aggregates of different chloride content are stored on the site, their use in the various classes of concrete shall be strictly controlled.

ADD THE FOLLOWING SUBCLAUSES:

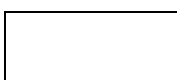
PSG 3.4.4 Aggregate of dolomitic origin

Aggregates for structural concrete shall be of dolomitic origin. The quantity of insoluble matter in respect of concrete, made with aggregates of dolomitic origin, determined according to the method described in SABS 677, Appendix C, shall not be more than 15%.

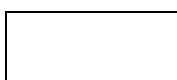
ADD THE FOLLOWING SUBCLAUSES:

PSG 3.9 WATERSTOPS

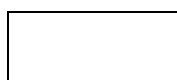
PVC water stops shall comply with the requirements of CKS389.



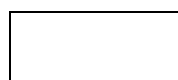
Contractor



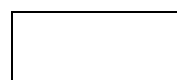
Witness 1



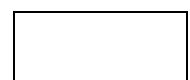
Witness 2



Employer



Witness 1



Witness 2

PSG3.10 ROOFING FELT

Three-ply roofing felt shall comply with the requirements of SABS 192 for type 40 felt.

PSG3.11 BUTYL RUBBER OR POLYMER SEALING STRIPS

The dimensions of the sealing strip for use in the structures are shown on the drawings. The strips shall be permanently bonded to the prepared concrete surface in accordance with the manufacturer’s specifications.

The strip shall have a breaking elongation of not less than 300% and a tensile strength of not less than 4MPa as per manufacturer’s specification.

The completed joint shall be guaranteed 100% watertight and resistant to long-term effects of the retained aqueous liquid.

PSG3.12 LAMINATED BUTYL RUBBER OR POLYMER WATERPROOFING STRIPS

3mm thick laminated butyl rubber OR 2mm thick polymer strips shall be permanently fixed to the concrete where shown on the Drawings.

The preparation of the concrete surface, the installation of bond breakers and aluminium backing strips, the fixing of the laminated butyl rubber or polymer waterproofing strip with an approved epoxy adhesive as specified by the particular manufacturer and the forming of lapped joints shall all be done according to the manufacturer’s specifications to provide a watertight joint.

PSG 4 PLANT

PSG 4.5 FORMWORK

PSG 5.1 REINFORCEMENT

PSG 5.1.2 Fixing

ADD THE FOLLOWING:

The Engineer will inspect the reinforcing ager it has been fixed in place, the formwork has been cleaned, cover blocks have been positioned, and before concreting commences.

Welding of reinforcing steel will not be permitted.

PSG 5.1.3 Cover

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ADD THE FOLLOWING:

The distance between pipes in the concrete and the reinforcing steel shall nowhere be less than 40mm or 5mm plus the maximum size of the coarse aggregate, whichever is the largest, unless otherwise specified on the drawings.

PSG 5.2 FORMWORK

PSG 5.2.1 Classification of finishes

(c) Special

This finish is obtained by first giving the surface a smooth finish with the joints between formwork panels forming as approved regular pattern suitable for the appearance of the structure. All projections shall then be removed, irregularities repaired and the surface rubbed or otherwise treated until it is smooth with and even texture, appearance and colour.

If the finish of exposed surfaces does not comply with the requirements for uniformity of the texture and appearance, the Contractor shall, when instructed to do so by the Engineer, rub down the exposed surfaces of the entire structure or any part thereof as specified below, entirely at his own cost. All repairs must be completed before the rubbing commences.

The surface shall be saturated with water for at least one hour. The initial rubbing of the face shall be carried out with a medium coarse carborundum stone together with a small amount of mortar of the same cement/ sand ratio as the concrete being repaired. Rubbing shall continue until all form marks, projections and irregularities have been removed and a uniform surface has been obtained. The paste produced by the rubbing shall be kept in place. The final rubbing shall be carried out with a fine carborundum stone and water. This rubbing shall continue until the entire surface has a smooth, even texture and is uniform in colour. The surface shall subsequently be washed with a brush to remove surplus paste and powder.

PSG 5.2.5 Removal of formwork

ADD THE FOLLOWING SUBCLAUSE:

PSG 5.2.5.7 The Contractor shall make provision for the continued support of beams and slabs while the formwork is being removed and/or for back propping of beams and slabs.

PSG5.3 HOLES, CHASES AND FIXING BLOCKS

ADD THE FOLLOWING:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Cover blocks for reinforcing and fixtures may be placed into the concrete provided that neither the strength nor any other desirable characteristic (such as the appearance) of the concrete section is affected or impaired in the opinion of the Engineer.

PSG 5.5 CONCRETE

PSG 5.5.1 Quality

PSG 5.5.1.5 Durability

The exposure conditions of the concrete are classified as “severe”

PSG 5.5.3 Mixing

PSG5.5.3.2 Ready-mixed concrete

ADD THE FOLLOWING:

Ready-mix concrete may be used on the Site. The Contractor shall take samples for testing from every load delivered to the Site.

PSG 5.5.7 Construction joints

ADD THE FOLLOWING:

Horizontal construction joints are permitted in structure walls in positions indicated on the drawings or approved by the Engineer. Vertical construction joints in the walls are subject to the written approval of the Engineer and the cost of all such vertical and horizontal construction joints will be deemed to be included in the rates for cash-in-situ concrete. This also applies to the preparation of concrete to form construction joints in flume walls as specified on the drawings.

Should the Contractor’s method of construction necessitate the placing of a construction or other joint in a position not shown on the drawings, such method of construction and position of the joint shall be approved by the Engineer in writing. The cost of such joint shall be included in the tendered rates and shall include scabbing of the concrete where steel reinforcement is continuous.

The walls shall be cast in lifts of a height that permits each lift to be poured without interruption in one continuous operation during normal working hours.

PSG 5.5.8 Curing and protection

The curing methods of retaining the formwork in place or covering with a waterproof membrane are strongly recommended. Concrete will not be paid for unless properly cured and proof of curing is continuously visible on site.

PSG5.5.10 Concrete surfaces

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

5.5.10.4 Where the surfaces of the concrete are to be additionally hardened or protected, the positions of such surfaces and the method to be used will be shown on the drawings and will be scheduled. Materials or products with a ferrous content will not be allowed.

PSG 5.510.5 Floor slabs and screeds for settling tanks

(a) Surface of floor slab below screed

The top surface of the floor slab is to have a finish which is rough enough for bonding of the screed. This finish and the preparation thereof is to be discussed with the Engineer before the floor slab is cast.

All laitance on the surface of the slab must be removed completely to expose the course aggregate by means of scrabblers, abrasive blasters, hard brooms or a high pressure water jet, immediately after concrete has set.

All joints shall be sealed in the manner shown on the drawings. All dust, debris, etc. must be removed immediately prior to the application of the bonding agent and screed.

(b) Materials

Only ordinary Portland cement shall be used.

Coarse aggregate maximum sized for Structural Concrete: 19mm

Coarse aggregate maximum sized for Mass Concrete: 38mm

28-day cube strength for Structural Concrete: 30MPa

28-day cube strength for Mass Concrete: 15MPa

A plasticizer approved by the Engineer shall be used to reduce the water content of the mix to an absolute workable minimum.

The mix design shall be submitted to the Engineer for approval.

(c) Placing of screed

All surface water shall be removed after which Fosroc Nitobond EP slowest bonding agent or similar approved shall be applied strictly according to the manufacturer's specifications. The screed shall be placed according to the recommendations and/or specifications of the manufacturer of the bonding agent.

The screed shall be placed, spread and compacted in one layer and care shall be taken to obtain maximum compaction. After the screed has been compacted and before the surface is power floated, angle irons fixed to the mechanical equipment shall be used to finish off the screed to the correct levels.

Power floating shall not commence until such time as the screed surface has lost its sheen and barely shows footprints. All laitance on the surface of the screed resulting from compaction shall be stuck off prior to power floating. Too much floating causing

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

excessive cement-water paste to surface, shall be avoided.

Curing shall commence as soon as finishing operations have been completed and shall be continued for at least 7days. The method of curing shall be by means of a peripheral pipe directly next to the inside face of the wall with water running down the slope of the centre cone. This shall be discussed with the Engineer. Any alternative curing method must be submitted to the Engineer for approval.

(d) Joints

The joints in screeds shall be constructed according to the details shown on the drawings and must in all cases be aligned with the joints in the floor slab below.

(e) Surface finish of screeds

The finishing-off of the screed shall be done in conjunction with the mechanical contractor to ensure that the surface fits the mechanical equipment. The maximum allowable deviation of the floor from the design level is ±3mm.

PSG 5.5.19 Brickwork

Brickwork shall be carried out as specified for manholes in sub clause 5.6.4 of 1200LD using bricks conforming to the requirements for bricks in sub clause 3.5.1 of 1200LD.

PSG 5.5.20 Plasterwork

Plasterwork shall consist of a single coat, comprising one application of a 1:6 cement:sand mixture with a wood float finish. The thickness of the plaster shall be between 13 and 20mm. All plaster shall be finished smooth, shall be plumb and corners shall be rounded and square.

PSG 6 TOLERANCES

PSG 6.2 PERMISSIBLE DEVIATIONS

PSG 6.2.3 Specified permissible deviations

ADD THE FOLLOWING:

Degree-of-accuracy II is applicable

Every specified permissible deviation is binding in itself. The cumulative effect of permissible deviations will not be considered. The maximum permissible vertical deviation is subject to the other permissible deviations.

REPLACE SUBCLAUSE 6.2.3(d)(5) WITH THE FOLLOWING:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Permissible deviation		
Degree of accuracy		
III	II	I
mm	mm	mm
5	3	2
50	30	10

Vertically, per metre of height.....
 Subject to a maximum of

PSG 7 TESTS

PSG 7.1 FACILITIES AND FREQUENCY OF SAMPLING

PSG 7.1.1 Facilities

ADD THE FOLLOWING:

The Contractor shall provide sufficient storage capacity for the concrete cubes and shall arrange to have them tested by an approved laboratory. The cost of all testing, including the cost of sampling, storage and transport of samples shall be included in the rates tendered for.

PSG 7.3 ACCEPTANCE CRITERIA FOR STRENGTH CONCRETE

The tendered rate shall include full compensation for all plant, equipment, labour and consumables and associated spoiling of unsuitable material required to effectively construct the steel framed Test results obtained from the supplier of ready-mixed concrete will not be accepted for evaluation in terms of sub clause 7.3 but samples for testing shall be taken of such concrete at the point of placing.

PSG 8.12 MANHOLE

The tendered rate shall include full compensation for all plant, equipment, labour and consumables and associated spoiling of unsuitable material required to effectively construct the manhole as per the relevant drawings.

SDH STRUCTURAL STEELWORK (SANS 1200 H)

SDH3 Materials

SDH3-1 Structural steel (Sub clause 3.1)

Unless otherwise stated, the grade of steel for all members shall be Grade 300W and shall comply with the requirements of SANS 1431.

SDH3-2 Bolts, nuts and washers (Sub clause 3.6)

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

All bolts, nuts and washers used shall be hot dip galvanized.

SDH3-3 Single length members

The Contractor shall use only single length structural members. Only in exceptional cases will making up of member lengths by welding short lengths together be permitted and then only in accordance with details as approved by the Engineer. In cases where the required member length is longer than available stock lengths, details of joints shall be as supplied, or approved, by the Engineer.

SDH3-4 Sectional steel tanks

The sectional steel tank to be provided and erected by the Contractor shall be designed and constructed in accordance with SANS 10329:1998.

SDH4 Plant

SDH4-1 Transportation, handling and erection

The Contractor shall supply and use all scaffolding, lifting equipment and other plant required in accordance with Sub clause 4.1.

SDH5 Construction

SDH5-1 Drawings and shop details

SDH5-1.1 Verification of dimensions

The Contractor shall be solely responsible for the final verification of all steelwork dimensions before manufacturing any steelwork components.

SDH5-1.2 Contractor provides shop details. (Sub clause 5.1.2)

The Contractor shall be responsible for the preparation, in accordance with the relevant section SANS 10162, of shop drawings and/or details. The Engineer will require five working days for the approval of shop drawings/details submitted by the Contractor.

SDH5-2 Fabrication

SDH5-2.1 Cutting (Sub clause 5.2.3)

Where it is necessary to flame cut plates, edges of plates shall be ground smooth.


SDH5-2.2 Holes for fasteners (Sub clause 5.2.4)



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

Holes for fasteners shall be drilled. Punching of holes will only be permitted with the approval of the Engineer.

Flame cutting of holes will in general not be permitted. Where permission is given in writing, the hole shall be burnt to a diameter at least 5mm smaller than the required diameter and then reamed to the correct size.

SDH5-2.3 Structural hollow section (Sub clause 5.2.6)

All structural hollow sections shall be sealed against the ingress of moisture. All holes through structural hollow sections shall be fitted with spacer sleeves welded into position. The minimum wall thickness of the sleeve shall be 2mm.

SDH5-2.4 Sectional steel tanks

The proposed tank towers shall comprise the following:

- a) prefabricated pressed steel tanks with a minimum storage capacity of 100 kℓ with a nominal height of 4,8, with a watertight roof, two lockable access covers, two ventilation openings, and provision for the accommodation of level control apparatus;
- b) the tank shall be mounted close to ground level, with steel base plates and anchor bolts to be bolted to concrete foundations;
- c) pipework complete with specials, accessories, valves, and fixing of inlet, outlet, overflow and scour pipes. Pipe diameters shall be as follows:

inlet	-	400 mm
outlet	-	400 mm
overflow	-	200 mm
scour	-	200 mm;
- d) internal ladder including fixings, external ladder, including fixings. The ladders shall comply with the relevant requirements of Sub clause 13A. of the Occupational Health and Safety Act (Act No. 85 of 1993);
- e) water level indicator; and
- f) lightning protection as specified in SDH5-6.

The work shall further include excavations for and the construction of foundations, paintwork, testing for water tightness, disinfection and finishing off of the site as specified.

SDH5-3 Assembly (Sub clause 5.3)

SDH5-3.1 General (Sub clause 5.3.1)

Shop connections shall be welded wherever possible.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SDH5-3.2 Welding (Sub clause 5.3.4)

Welders shall show evidence of having passed the appropriate tests in SANS 10044.

SDH5-3.3 Marking (Sub clause 5.3.8)

Steelwork shall be marked with the item number, general arrangement drawing number and order number by both hard stamping (10mm letter size) and by means of waterproof paint. The hard stamping shall be ringed with white paint.

SDH5-3.4 Protective treatment (Sub clause 5.3.9)

Protective treatment shall comply with the requirements of SANS 1200 HC and the relevant Specification Data clauses.

SDH5-3.5 Repairs to protective treatment

All repairs to defective or damaged coatings, or where on site welding/cutting is required, shall be carried out in accordance with the requirements of SANS 1200 HC and the relevant Specification Data clauses.

SDH5-4 Erection (Sub clause 5.5)

SDH5-4.1 Procedure (Sub clause 5.5.1)

The Contractor shall submit a method statement for the Engineer's approval before erection of any structural steelwork commences. The method statement shall clearly indicate the use of temporary bracing to suit the erection sequence.

SDH5-4.2 Handling of prefabricated components of the water tower

Special care shall be taken to ensure that panels or any other components are not bent or damaged, or any galvanizing damaged during the handling process.

SDH5-5 Grouting of supports (Sub clause 5.6)

SDH5-5.1 Holding down bolts and grouting of supports

The Contractor shall supply all required holding down (HD) bolts, as well as a suitable steel template of each type of HD bolt layout which can be used to accurately position the bolts.

The Contractor shall be responsible for grouting of supports and grouting shall be completed prior to any sheeting being erected.

SDH5-6 Lightning protection to structures

The Contractor shall be responsible for the design, supply, installation and commissioning of the lightning protection and earthing system in accordance with the relevant SANS Codes of Practice by an approved SABS certified specialist contractor.

Relevant codes:

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- SANS 10313: The protection of structures against lightning.
- SANS 10199, as amended: The design and installation of an earth electrode.

The Contractor shall be responsible for the adequacy and suitability of the equipment/system supplied and installed by him.

Adequate and proper precautions shall be taken to prevent electrolytic corrosion where dissimilar metals are in contact, and to prevent the corrosion of aluminium.

Aluminium shall not be attached directly to concrete.

SDH7 Testing

SDH7-1 Test certificates (Sub clause 7.1)

Test certificates pertaining to steel used for the various members shall be supplied by the Contractor to the Engineer when called for.

SDH7-2 Inspection (Sub clause 7.2)

The Contractor shall advise the Engineer as soon as materials and fabricated parts are ready for inspection at the fabricator's works. The Engineer may require that portions of the work be reassembled at the fabricator's works to check the accuracy of the work.

SDH7-3 Inspection and testing of welds (Sub clause 7.3)

The Contractor may be required to carry out non-destructive tests on the welds, including but not limited to the Dye Penetration test.

SDH7-4 Testing for water tightness of pressed steel tank

The completed tank shall be fully watertight and the quality of finishes shall be such that no further work be required to achieve this standard.

The works will be not certified complete before the tank is tested watertight to the satisfaction of the Engineer.

Water tightness of the roof shall be tested by continuously sprinkling the roof with water using sprinklers approved by the Engineer. Sprinkling shall be such that a layer of water is maintained on the roof. The bottom of the roof shall be dry prior to commencement of testing. The roof will be regarded as watertight if there are no damp areas on the bottom surface of the roof plating after six hours of continuous sprinkling.

Water tightness of the tank shall be proven as follows:

Upon completion of the construction of the tank and when so approved by the Engineer, the tank shall be filled with water to the top, i.e. the overflow level.

The water level will then be observed by the Engineer and the cover will then be closed.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The water content shall then be left undisturbed for at least seven days, after which time the Engineer will again observe the water level. The tank will be regarded as watertight if no decrease in water level is observed.

In the event of leakage occurring during any stage of testing, or in the event of water tightness not being to the complete satisfaction of the Engineer, the Contractor shall, if so instructed by the Engineer, stop all testing. The Contractor shall then at his own cost implement approved measures to rectify the leakage to the complete satisfaction of the Engineer.

The Engineer shall also have the right to order tests during the Defects Liability Period. In the event of water tightness not being to the satisfaction of the Engineer, the Contractor shall rectify such leakage at his own cost. Remedial steps shall then be taken in such a manner that the disruption of the water supply is restricted to a minimum. The timing and execution of such remedial measures shall be to the satisfaction of the Engineer.

SDH8 Measurement and payment

SDH8-1 Supply and fabrication of steelwork (Sub clause 8.3.1.2)

The rate shall also cover the cost of supplying grade 4.6 and grade 8.8 bolts including nuts and flat and/or tapered washers as specified, the mass of which will not be measured.

SDH8-2 Templates for HD bolts

The cost of providing the steel templates specified in SDH5-5.1 shall be allowed for in the rates for HD bolts and no separate payment will be made for templates.

SDH8-3 Pressed steel tank

SDH8-3.1 Tank and tank stand

The pressed steel tank and the tank stand will each be measured by the sum.

The sum for the tank shall cover the cost of the design, supply and installation of the tank, including internal ladder and water level indicator.

The sum for the tank stand shall cover the cost of the design, supply and complete erection including external ladder. The concrete footings will be measured separately.

SDH8-3.2 Pipework

The pipework to the tank will be measured separately.

SDH8-3.3 Water tightness testing

Water tightness testing of the pressed steel tanks will be measured by the sum for each tank.

The tendered sum shall cover the cost of the testing as specified in SDH7-4.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SDH8-4 Lightning protection

Lightning protection for each structure will be measured for payment as a sum.

The sum shall cover all costs of providing and installing the lightning protection as specified in SDH5-6.

SDH8-5 Miscellaneous items

Miscellaneous items will be measured separately as a sum.

The rate shall cover the cost of fabricating and supplying the specified or scheduled item complete as shown on the drawings and the cost of all fixings, installation, fixing (including welding where required) and grouting in.

SDH8-6 Corrosion protection

Notwithstanding Sub clause 8.3.13 and the provisions of SANS 1200 HC Subclause 8, the rates for supply and erection or installation of an item shall be deemed to include all costs relating to corrosion protection.

SDHB CLADDING AND SHEETING (SANS 1200 HB)

SDHB3 Materials

SDHB3-1 Sheeting

The roof sheeting and side cladding shall be "Brownbuilt Supa Clad (Light Industrial)" with "Chromadeck" finish (Traffic Green) on the outside.

The sheeting, cladding, gable trims and ridge ventilators shall be finished in "Chromadeck" or similar colour finish approved by the Engineer. The inside face may be standard grey colour.

SDHB3-2 Fasteners

All fasteners and washers shall be stainless steel.

SDHB5 Construction

SDHB5-1 Installation

The sheeting, cladding, gable trims and ridge ventilators shall be fitted and fixed according to the manufacturer's specifications for the wind conditions at the Site (see SANS 0160).

SDHB8 Measurement and payment

SDHB8-1 General

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Cladding and sheeting will be paid on the basis of a lump sum item in the Bill of Quantities. The measurement and payment clauses of SANS 1200 HB shall not apply.

The amount tendered for the lump sum shall include for the supply, delivery, installation and fixing of the cladding and sheeting and ancillary items. Everything necessary for the proper completion of the work shall be included.

SDHC CORROSION PROTECTION OF STRUCTURAL STEELWORK (SANS 1200 HC)

SDHC5 Construction

SDHC5-1 Corrosion protection systems (Subclause 5.7)

SDHC5-1.1 Corrosion protection System 1

Applies to all interior structural steelwork to the pumpstations.

		Application method	Location	Dry film thickness
a)	Preparation: Blast clean: to Sa 2½ Blast profile: 40 to 60 µm			
b)	Primer: Zinc Phosphate with Aluminium flake e.g. Plascon Code UC 183	Z	Workshop	50 µm
c)	2nd coat: Alkyd micaceous iron ore e.g. Plascon code RP	Z	Workshop	40 µm
d)	3rd coat: High grade alkyd enamel e.g. Plascon G Range	Z	Site	35 µm

Application method: Z = By brush, roller or airless spray.

SDHC5-1.2 Corrosion protection System 2

Applies to all exterior structural steelwork except floor plates.

		Application method	Location	Dry film thickness
--	--	--------------------	----------	--------------------

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Paint : 2 coats alkyd enamel after erection.

SDHC5-1.5 Corrosion protection System 5

Applies to all exterior mild steel nuts, bolts and washers.

Material : Hot dip galvanized mild steel.

Preparation : Clean and degrease with "Galvkleen" or equal approved.

Primer : One coat of etching primer.

Paint : 2 coats bituminized aluminium after erection.

PSL MEDIUM-PRESSURE PIPELINES

PSL3 MATERIAL

PSL3.1 GENERAL

PARAGRAPHS:

Each type of pipe delivered to the Site shall be of a standard length corresponding to the standard lengths offered by the pipe manufacturer in his catalogue, with a maximum permissible variation in length of ±2%.

A pipe that is shorter or longer than the defined standard will be rejected by the Engineer, except when such non-standard lengths are required in terms of the Contract and have been specifically manufactured or cut as such by the pipe manufacturer or supplier.

PSL3.7 OTHER TYPES OF PIPES

PSL 3.7.1 uPVC pipes

REPLACE THE CONTENT OF THIS SBCLAUSE WITH THE FOLLOWING:

Pipes used in villages shall be class 6 pipes and transmission pipes shall be class 9.

PSL 3.7.2 Polyethylene pipes

REPLACE THE CONTENT OF THIS SBCLAUSE WITH THE FOLLOWING:

Polyethylene pipes shall be HDPE type IV pipes with compression fittings and shall comply with SABS ISO4427PE100, PN20 or as scheduled.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

PSL3.9 CORROSION PROTECTION

PSL3.9.2 Steel pipes

PSL3.9.2.1 Steel pipes nominal bore up to 150mm

ADD THE FOLLOWING:

Steel pipes shall be galvanized where shown on the Drawings

PSL3.9.2.2 Steel pipes of nominal bore over 150mm

ADD THE FOLLOWING:

Steel pipes shall be hot-dip galvanized where shown on the Drawings and as specifies in sub clause 3.9.2.1

PSL 3.9.6 Corrosive soil

ADD THE FOLLOWING:

Where shown on the Drawings, steel pipes in contact with corrosive soil shall be wrapped with Densopol 80HT or an equivalent approved product, strictly in accordance with the manufacturer’s instructions.

PSL3.10 Valves

REPLACE THE CONTENT OF THIS SBCLAUSE WITH THE FOLLOWING:

Valve shall comply with the following requirement:

- (a) They shall open/close clockwise and have a non-rising spindle and handwheel.
- (b) They shall be class 16 valves complying with SABS 664.
- (c) They shall comply with requirements of SABS 1123 table 1600

PSL 5 CONSTRUCTION

PSL 5.6 VALVE AND HYDRANT CHAMBERS

PSL 5.6.1 General

REPLACE THE WORDS “drawing L-1” IN THE SECOND LINE WITH “the drawings”

PSL 7 TESTING

PSL 7.3 STANDARD HYDRAULIC PIPE TEST

PSL 7.3.1 Test pressure and time of test

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSL 7.3.1.2 The maximum working pressure for the different pipes is indicated by the class of the pipe.

PSL 8 MEASUREMENT AND PAYMENT

PSL 8.2 SCHEDULED ITEMS

PSL 8.2.11 Anchor blocks/ Thrust blocks and pedestals

INSERT “concrete” BEFORE “and” IN THE LAST LINE OF THE LAST PARAGRAPH
ADD THE FOLLOWING:

The tendered rates shall also include the wrapping of uPVC pipes and fittings with Densopol 80 or similar approved material where the pipes and fittings come into contact with concrete.

PSLB BEDDING (PIPES)

PSLB 3 MATERIALS

PSLB 3.1 SELECTED GRANULAR MATERIAL

REPLACE THE CONTENT OF THIS SBCLAUSE WITH THE FOLLOWING:

Selected granular material shall have a PI not exceeding 6 and shall be free from sharp-edged particles exceeding 19mm.

PSLB3.2 SELECTED FILL MATERIAL

ADD THE FOLLOWING:

Selected fill material used for bedding shall, where indicated on the Drawings be stabilized with 5% cement as specified under sub clause PSDB 3.5(c).

PSLB 3.3 BEDDING

ADD THE FOLLOWING:

uPVC and HDPE pipes are deemed to be flexible pipes for the purpose of this sub clause.

PSLB 3.4 SELECTION

PSLB 3.4.1 Suitable material available from trench excavation

REPLACE THE WORDS “(but is not required)” IN THE FIFTH LINE WITH THE WORDS “(at his own cost)”



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

PSLB 8 MEASUREMENT AND PAYMENT

PSLB 8.1 PRINCIPLES

PSLB 8.1.5 Disposal of displaced material

REPLACE THE CONTENT OF THIS SUBCLAUSE WITH THE FOLLOWING:

Material displaced by the pipeline and by imported material from sources other than trench excavation, shall be disposed of at an approved site furnished by the Contractor. No haulage is payable for such material.

PSLB 8.1.6 FREE-HAUL

DELETE THE WORDS “of 0,5km” IN THE FIRST LINE OF THIS SUBCLAUSE

PSLB 8.2 SCHEDULED ITEMS

PSLB 8.2.6 Extra over items 8.2.1 and 8.2.2 for bedding stabilized with 5%cement..Unit: m³

The extent rate shall include full compensation for selecting, mixing, backfilling and compacting the stabilized material to 90% of modifies AASHTO density

PCLC CABLE DUCTS

PSLC 3 MATERIALS

PSLC 3.1 DUCTS

ADD THE FOLLOWING:

PSLC 3.1.2 Split uPVC pipes

Split pipes shall only be used to provide ducts for existing services that cannot be severed and threaded through the ducts. The pipes shall be cut accurately in the middle, and opposite halves shall be matched as sawn. Split pipes shall be placed around the service, firmly bound by steel straps, and encased in concrete.

PSLC 3.4 CABLE DUCT MARKERS

ADD THE FOLLOWING:

A cable duct marker shall consist of a 300mm x 300mm x 100mm deep, class 20MPa/19mm concrete block, connected by means of a non-ferrous metal strip to a temporary plug to seal the end of the duct. The plug shall prevent moisture or soil from entering the duct. The metal strip shall be firmly connected to both the plug and the concrete block. The concrete block shall be positioned not further than 0.5m horizontally from the end of the cable duct. The face of the concrete block shall be clearly marked “E” to indicate electricity cables.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSLC 5 CONSTRUCTION

PSLC 5.3 DUCT LAYING

PSLC 5.3.1 Straight laying

ADD THE FOLLOWING:

If the trench is to contain more than one pipe exceeding 75mm internal diameter, the base of the trench shall slope so that water may drain away from the pipes. The level of the bottom of the trench shall fall at least 75mm per 30m.

PSLC 5.3.3 Draw wire

REPLACE THE CONTENT OF THIS SBCLAUSE WITH THE FOLLOWING:

A length of 3.05mm diameter galvanized iron wire (supplied by Telkom) shall be attached to the cleaning-brush and drawn into the pipe and left for use as a draw wire. Surplus wire at least 2m in length shall be left neatly coiled at each duct. All open pipe ends must be plugged to prevent the ingress of dirt.

ADD THE FOLLOWING SUBCLAUSES:

PSLC 5.6 LAYING OF CABLES WITH OTHER SERVICES

ADD THE FOLLOWING:

Trenches for telephone ducts shall be excavated so that pipes can be laid at least 300mm from power cables. Where this is not possible, pipes shall be separated from power cables by vertically placed concrete or paving slabs.

PSLC 5.7 CROSSING OF TELEPHONE AND ELECTRICITY CABLE DUCTS

REPLACE THIS SUBCLAUSE WITH THE FOLLOWING:

When a duct crosses an existing service such as an electricity supply cable, a water supply pipe or a sewerage pipe, the telecommunication duct shall, if possible, be laid not less than 25mm above the existing service. Where the depth of the existing service is insufficient for this to be done, the telecommunication duct shall be laid to pass not less than 25mm below the other service.

PSLC 7 TESTING

ADD THE FOLLOWING SUBCLAUSE:

PSLC 7.4 FINAL INSPECTION

A final inspection will take place on completion of the work. The Contractor shall, at his own cost, expose all pipe ends prior to the final inspection, after which they may be finally plugged and closed.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSLC 8 MEASUREMENT AND PAYMENT

PSLC 8.2 SCHEDULED ITEMS

PSLC 8.2.5 Supply, lay, bed and prove duct

REPLACE THE PAYMENT PARAGRAPH WITH THE FOLLOWING:

Separate items are scheduled for each diameter of duct.
The rates shall cover the cost of providing all the materials and the cost of laying the ducts, installing

PSLD SEWERS

PSLD 3 MATERIALS

PSLD 3.1 PIPES, FITTINGS AND PIPE JOINTS

ADD THE FOLLOWING TO SUBCLAUSE 3.1.5:

“Pipes and specials for sewer mains and house connections shall be medium or heavy duty multiplayer PVC-U pipes with a pipe stiffness of at least 200 kPa for medium and 400 kPa for heavy duty pipes.”

PSLD 3.5 MANHOLES, CHAMBERS, ETC

PSLD 3.5.2 Precast concrete sections

ADD THE FOLLOWING:

"Sectional spun-concrete cylinders, mortar, benching and plastering shall be manufactured from dolomitic aggregate."

PSLD 3.6 MARKER POSTS

REPLACE THE WORDS "Project Specification" WITH "Drawings"
ADD THE FOLLOWING:

“Marker posts shall be manufactured from 1.5 m long R25 bars hooked at one end and cast into Grade 15 MPa/19 mm concrete blocks not less than 300 x 300 x 300 mm in size. Each post shall have a 150 mm wide band painted at the top using an approved exterior enamel paint to indicate the service.”

PSLD 5 CONSTRUCTION

PSLD 5.6 MANHOLES, INSPECTION CHAMBERS ETC

DELETE AND INSERT THE FOLLOWING:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

“Manholes shall generally be precast concrete rings with sealed joints as detailed on Drawings SANS 1200 LD–5, and shall be installed according to the manufacturer’s specifications. After the joints have been sealed with an approved sealant in accordance with Sub clause 3.5.2 the joints shall be covered on the outside by a double wrapping of polyethylene adhesive tape.

The flexible connections to the manholes shall be as shown on Drawings SANS 1200 LD-2.

Benching shall be constructed at a slope of 1 (vertical): 4 (horizontal).
The frames for manhole covers must be fixed to the top of the cover slab with 1:3 cement sand mortar.

Brickwork 220 mm thick with 1:4 cement sand mortar must be used for the correction of cover slab heights.

The depth of the shaft (min 300 mm) may not exceed 600 mm.
The top of manholes situated in the veld shall be 300mm above existing ground level.”

PSLD 5.9 CONNECTING SEWERS

PSLD 5.9.1 Location and details

DELETE THE FOLLOWING FROM THE FIRST PARAGRAPH:

"or required in terms of the Project Specifications."

DELETE THE SECOND PARAGRAPH.

PSLD 8 MEASUREMENT AND PAYMENT

PSLD 8.2 SCHEDULED ITEMS

PSLD 8.2.11 Connection to existing sewer at

REPLACE THIS ITEM WITH THE FOLLOWING:

"PSLD 8.2.11 Connection to existing sewer manhole.....Unit: sum

The tendered sum shall include full compensation for excavation, making an opening in the existing manhole, installing new pipes in the new opening, breaking out and modifying the channelization inside the manhole to suit the new pipe layout, ensuring the water tightness of the new connection, supplying all the necessary materials, removing surplus material and debris, all labour and equipment required to make the connection, and liaison with the local authorities."

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

ADD THE FOLLOWING ITEM:

"PSLD 8.2.13 Breaking into existing sewer and building a new manhole.....Unit: Number

The tendered rate shall include full compensation for excavation, building a new manhole over the sewer, breaking into the existing sewer, building the channelization under wet conditions, ensuring the water tightness of the new connection, supplying all the necessary materials, removing surplus material, all labour and equipment required to make the connection, and liaison with the local authorities." the draw wire, jointing, bedding and providing all as specified.

PSME SUBBASE

PSME 3 MATERIALS

PSME 3.2 PHYSICAL PROPERTIES

PSME 3.2.1 Subbase material

REPLACE THE CONTENTS OF PARAGRAPH (a) WITH THE FOLLOWING:

- (a) The maximum particle dimension of the gravel shall not exceed 63mm.

REPLACE THE CONTENTS OF PARAGRAPH (d) WITH THE FOLLOWING:

- (d) The CBR at specified density shall be 45 for unsterilized material as well as for stabilized material prior to stabilization

DELETE PARAGRAPH (e)

PSME 3.2.2 Gravel shoulder and gravel wearing course material

REPLACE THE CONTENT OF THIS SBCLAUSE WITH THE FOLLOWING:

The material used for gravel shoulders and gravel wearing course shall comply with the following:

- (a) The PI shall not be less than 6 and not more than (3 x GM)+ 10.
- (b) The maximum particle dimension of the gravel shall not exceed 40mm.
- (c) The CBR shall be greater than 15 at 93% of modified AASHTO density.

PSME 5 CONSTRUCTION

PSME 5.2 EXCAVATION

PSME 5.2.2 Borrow pits

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

INSERT THE WORDS “designated by the Engineer and” BETWEEN THE WORDS “pits” AND “established” IN THE FIRST LINE.

PSME 5.8 WEED-KILLER

The subbase layer shall be treated before compaction by applying and mixing in granular HYVAR X or TENOC X weed-killer in accordance with the manufacturer’s instructions. An approved equivalent may be used.

PSME 5.9 INSECTICIDE

An insecticide approved by the Engineer shall be applied strictly in accordance with the manufacturer’s instructions over the total area of the subbase. The instructions indicate whether the poison is to be applied before or after compaction of the layer.

PSME 8 MEASUREMENT AND PAYMENT

PSME 8.1 BASIC PRINCIPLES

INSERT A SEMICOLON IN THE FIRST LINE OF PARAGRAPH (b) AFTER THE WORDS “will be paid for once only” AND DELETE THE REST OF THE PARAGRAPH.

AMEND PARAGRAPH (d) AS FOLLOWS:

(d) That in case of material from a commercial source or from borrow pits selected by the Contractor, no additional payment will be made for the class of excavation, method of processing (except stabilizing) or overhaul.

PSME 8.3 SCHEDULED ITEMS

PSME 8.3.2 Construct the subbase course/ shoulder/gravel wearing course with material from designated excavations

REPLACE THE CONTENTS OF SUBITEM (a) WITH THE FOLLOWING:

The rate for (a) shall include full compensation for excavating and selecting subbase material, for loading and transporting the material within the free-haul distance, and for either placing the material on the road or stockpiling the material for later use. When material is stockpiled, the rate shall include compensation for shaping and grading the stockpile so that it is free-draining.

PSME 8.3.3 Construct the subbase course/ shoulder/gravel wearing course with material from commercial sources or designated borrow areas

REPLACE THE HEADING OF THIS ITEM WITH THE FOLLOWING:

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSME 8.3.3 Construct the subbase course/ shoulder/gravel wearing course with material from commercial sources

ADD THE FOLLOWING PARAGRAPH:

This item shall also apply to the construction of subbase course/shoulder/gravel wearing course with material from borrow pits selected by the Contractor.

PSME 8.3.11 Treatment of subbase with:

- (a) Weed-killer..... Unit: m²
- (b) Insecticide Unit: m²

The tendered rates shall include full compensation for supplying, spreading and mixing or applying the poison.

Only areas that were treated on written instructions of the Engineer will be measured for payment.

PSMF BASE

PSMF 3 MATERIALS

PSMF 3.3 PHYSICAL AND CHEMICAL PROPERTIES

PSMF 3.3.1 Natural gravel (stabilized or unstabilized)

REPLACE THE CONTENTS OF PARAGRAPH (a) WITH THE FOLLOWING:

- (a) The maximum particle dimension of the gravel shall not exceed 63mm.

PSMF 5 CONSTRUCTION

PSMF 5.3 PROCESSING

REPLACE THIS SUBCLAUSE WITH THE FOLLOWING:

PSMF 5.3 CHEMICAL MODIFICATION

The base material shall be prepared, broken down and spread. Road lime complying with the requirements of SABS 824 shall then be spread over the prepared base material at a rate of 3.0%. The materials shall then be mixed dry using road graders, ploughs and other suitable equipment until the lime is mixed thoroughly and uniformly with the base material. The mixed material shall then be watered, mixed and lightly compacted.

After 24 hours have elapsed the material shall be ripped, worked in the normal manner and compacted to 98% of modified ASSHTO density.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSMF 5.4 PLACEMENT AND COMPACTION OF A BASE OTHER THAN A WATER-BOUND MACADAM BASE

PSMF 5.4.4 Compaction

REPLACE THE CONTENT OF THIS SBCLAUSE WITH THE FOLLOWING:

The base material shall be compacted to 86% of apparent density which is determined as follows:

(a) Apparatus

- Balance to measure 5kg accurately to within 0,5g
- Pycnometer (e.g. a preservative jar with flat ground rim)
- Temperature-controlled bath with thermostat capable of maintaining the temperature at $\pm 25^{\circ}\text{C}$
- Thermometer (0°C - 100°C)
- Drying oven capable of maintaining temperatures between 105°C and 110°C
- Towels
- 10% Teepol solution

(b) Method

Take 3000g to 4000g of the material from a density hole in the road. All the material obtained from the hole should preferably be used. If there is too much for one pycnometer, the material may be divided between two pycnometers.

Dry the material to constant mass in an oven at 105°C to 110°C .

Ensure that the pycnometer is clean, and determine its mass together with that of a marked sheet of glass.

Place the dried sample in the pycnometer and determine the combined mass of the pycnometer, glass sheet and sample (the sample should not be more than half the pycnometer’s volume)

Add clean water at a temperature of 25°C to the pycnometer until it is approximately three quarter full. Add three drops of the 10% Teepol solution to the water, close the pycnometer and shake thoroughly for 1 to 2 minutes.

Fill the pycnometer to near the brim with water at a temperature of 25°C and place it in a thermostatically controlled bath at 25°C . Leave for 30 minutes without disturbing.

Remove the pycnometer without shaking or jarring it and place it on a spread towel. Fill with water at a temperature of 25°C and slide the glass sheet carefully over the brim from one side. Make sure that no air bubbles are trapped beneath the glass sheet. Dry the pycnometer and the glass sheet carefully all over and determine the mass of the filled pycnometer plus the glass sheet.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Remove the contents of the pycnometer and clean and fill it in the same manner with water at a temperature of 25°C. Dry the pycnometer and determine the mass of the pycnometer filled with water together with the glass sheet.

(c) Calculation

The apparent density of the material is calculated as follows:

Mass of pycnometer + glass sheet = a

Mass of pycnometer + glass sheet + material = b

Mass of material only = (b – a)

Mass of pycnometer + material +water + Glass sheet = c

Mass of pycnometer + water+ glass sheet = d

Apparent density of material = $(b - a) / \{(d - a) - (c - b)\}$

NOTES:

- (1) Do not add any chemicals other than the Teepol solution to the water.
- (2) No suction should be applied to the water to remove air.
- (3) The temperature of the water should be 25°C ±1°C and no other temperature should be used.
- (4) When two pycnometers are used, the apparent density is calculated from the weighted average of the two results.

PSMF 5.9 TRANSPORT

REPLACE THE CONTENT OF THIS SUBCLAUSE WITH THE FOLLOWING:

All movement of material will be considered as free-haul. No haulage cost will be paid.

PSMF TESTING

PSMF ROUTINE INSPECTION AND TESTING

REPLACE TABLE 4 WITH THE FOLLOWING:

TABLE 4 – APPARENT DENSITY OF BASE

Specified apparent density %	Number of test per lot	Minimum average density%	Minimum value for any single test,%
------------------------------	------------------------	--------------------------	-------------------------------------

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

86	4	86.1	82.7
	5	86.4	82.6
	6	86.5	82.4
	7	86.7	82.3
	8	86.8	82.2
	9	86.9	82.1

PSMF8 MEASUREMENT AND PAYMENT

PSMF 8.3 SCHEDULES ITEMS

PSMF 8.3.3 Construct base with material from commercial sourced or designated borrow areas

REPLACE THE TITLE OF ITEM 8.3.3 WITH THE FOLLOWING:

PSMF 8.3.3 Construct base course with material from commercial sources and compact to 86% of apparent density

PSMF 8.3.5 Process base material by the following processes, as relevant and use in base (applicable to 8.3.1or 8.3.2 or both):

ADD THE FOLLOWING SUBITEM:

- (d) **Process base material by chemical modification (applicable to item 8.3.1)**
Unit: m³

The tendered rate shall include full compensation for the chemical modification a specified, including all labour, transport , etc. The modifying agent will be paid for under item PSMF 8.3.8.

PSMF 8.3.8 Stabilizing agent

REPLACE THE HEADING OF THIS ITEM WITH THE FOLLOWING:

PSMF 8.3.8 Road lime for modification.....unit: t

PSMF 8.3.9 Overhaul:

REPLACE THE CONTENTS WITH THE FOLLOWING:

- (a) Limited overhaul.....Unit: m³
- (b) Long overhaul.....Unit: m³ -km

Overhaul will be paid in accordance with item 8.3.6 of SABS 1200D

PSMK KERBING AND CHANNELLING

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PSMK 3 MATERIALS

PSMK 3.1 CONCRETE

ADD THE FOLLOWING:

The Contractor shall timeously submit the concrete mix design for cast-in-situ kerbing to the Engineer for approval and no kerbing shall be placed before the mix design has been approved.

PSMK 5 CONSTRUCTION

PSMK 5.11 TRANSITION SECTIONS AND INLET AND OUTLET STRUCTURES

DELETE THE WORDS “and with the requirement of the Project Specification” IN THE SECOND PARAGRAPH

PSMK 7 TESTING

PSMK 7.2 CAST-IN-SITU AND EXTRUDED KERBING AND CHANNELLING

PSMK 7.2.1 General tests

DELETE THIS SUBCLAUSE

PSMK 7.2.2 Alternative tests

REPLACE THE HEADING AND CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:

PSMK 7.2.2 Tests

The Contractor shall carry out a minimum of three cube crushing tests per 1000m of kerbing placed. The cost of such tests shall deemed included in the rates tendered for kerbing.

One cube crushing test shall consist of a set of six cubes made with concrete taken from the mixer, the kerbing machine or from any part of the work as ordered.

If, after 28 days in an approved laboratory, after three cubes of any set of six cubes have been tested, the average crushing strength is found to be more than 3MPa below the specified strength, kerbing represented by the cubes will be rejected.

The Contractor may apply for resubmission of the rejected section on the basis of cores drilled from this section and tested for the estimated actual crushing strength in accordance with SABS method 865 (excluding Appendix A). The cost of drilling and testing the cores is for the Contractor’s account, regardless of the outcome of the tests

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

on the cores. The number of cores required will be determined by the Engineer and the criterion for rejection or acceptance of the section represented by the cores shall be as specified above for cubes.

PSMK 7.3 RESPONSIBILITY FOR THE COST OF TESTING

DELETE THIS SUBCLAUSE

PSMK 8 MEASUREMENT AND PAYMENT

PSMK 8.2 SCHEDULED ITEMS

PSMK 8.2.1 Concrete kerbing

REPLACE "5.8.2" IN THE THIRD LINE OF PARAGRAPH (e) WITH "5.8.3"

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.6.2 PARTICULAR SPECIFICATIONS

PLI: GENERIC LABOUR-INTENSIVE SPECIFICATION

PLI 1 Scope

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- (a) Trenches having a depth of less than 1.5metres
- (b) Stormwater drainage
- (c) Low-volume roads and sidewalks

PLI 2 Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

PLI 3 Hand excavation material

Hand excavation material is material:

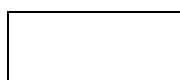
(a) **Granular materials:**

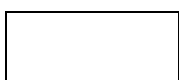
- (i) whose consistency when profited may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or
- (ii) where material is a gravel having a maximum particle size of 10mm and conditions no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

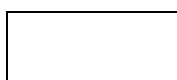
- Note:**
- (1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.
 - (2) A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60° with respect to the horizontal) into the material being used.

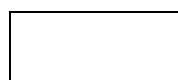
TABLE 1: Consistency of materials when profiled

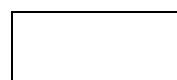
Granular materials		Cohesive materials	
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40mm; can be moulded by fingers with some pressure.

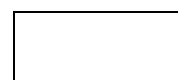

Contractor


Witness 1


Witness 2


Employer


Witness 1


Witness 2

Granular materials		Cohesive materials	
Medium dense	Considerable to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	High resistance to penetration by the sharp end of geological pick; requires many blows	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers
Very dense	High resistance to repeated blows of a geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point.

PLI 4 Trench excavation

All hand excavatable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

PLI 5 Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers

- (a) to 90% Proctor density;
- (b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders; or
- (c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

PLI 6 Excavation

All hand excavated material including topsoil classified as hand excavation shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

PLI 7 Clearing and grubbing

Grass and small bushes shall be cleared by hand.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PLI 8 Shaping

All shaping shall be undertaken by hand.

PLI 9 Loading

All loading shall be done by hand, regardless of the method of haulage.

PLI 10 Haul

Excavation material shall be hauled to its point of placement by mean of wheelbarrows where the haul distance is not greater than 150m.

PLI 11 Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilized for haulage.

PLI 12 Spreading

All material shall be spread by hand.

PLI 13 Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved.

PLI 14 Grassing

All grassing shall be undertaking by sprigging, sodding, or seeding by hand.

PLI 15 Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand. Sand and stone shall be hauled to its point of replacement by means of wheelbarrows where the haul distance is not greater than 150m. Grout shall be mixed and placed by hand.

PLI 16 Manufactured elements

Elements manufactured or designed by the contractor, such as the manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition, the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper handhold on them.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT: RFP/01/2023-24

Section C3.7
Occupational Health and Safety

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.7 HEALTH AND SAFETY

Specification AO

1. SCOPE

This Specification covers the health and safety aspects required of, and that shall be implemented during the construction and/or demolition work and/or plant installation specified in the Specification Data and standard specifications, shown on the drawings and/or billed in the Bill of Quantities. It covers temporary and permanent work.

This Specification does not replace, take precedence over nor detract from the Occupational Health and Safety Act or its Construction Regulations 2014. Nothing in this Specification shall relieve the Contractor of any obligations or responsibilities with regard to health and safety conditions and practices on site.

Interpretations and variations of this Specification are set out in the Specification Data.

2. NORMATIVE REFERENCES

2.1 Supporting specifications

Where this Specification is required for a project, the following specifications and/or documents shall, inter alia, form part of the Contract Document:

- a) Specification Data;
- b) SANS 1200 A or Specification T/AT as applicable;
- c) Occupational Health and Safety Act (Act No. 85 of 1993);
- d) Construction Regulations, 2014, and
- e) in addition to the above, one or more of the following specifications may be required:
 - i) SANS 1200 D;
 - ii) SANS 1200 DM;
 - iii) SANS 1200 DB. 1

3. DEFINITIONS AND ABBREVIATIONS

For the purpose of this Specification the definitions and abbreviations given in the applicable of the specifications listed in 2.1, the definitions given in the Construction Regulations and the following definitions and abbreviations shall apply:

OHS	Occupational Health and Safety
Construction Regulations	Construction Regulations, 2014 of the OHS Act (Act No. 85 of 1993).

4. REQUIREMENTS

4.1 Materials

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

4.1.1 Hazardous substances

4.1.1.1 General

The following commonly used construction materials and substances potentially pose health and safety hazards:

Substances in pressurized containers,
Certain cleaning substances,
Bitumen and tar products,
Epoxies,
Petroleum and petroleum products, Cement,
Lime and other stabilizing agents Timber preservatives
Paints,
Asbestos products.

Particular materials and substances to be used are specified in the Specifications and/or shown on the Drawings and others may be identified in the Specification Data.

Notwithstanding any requirements regarding specific materials, the Contractor shall take appropriate measures to manage the risks associated with the use of the applicable of the above materials, those listed in the Specification Data and all other hazardous materials required to complete the Works. He shall obtain Material Data Safety Sheets from the supplier of any hazardous substance and take particular notice of, and adhere to any precautionary instructions provided by the manufacturer or supplier regarding the storage, transport, handling, use and disposal of its materials and substances.

The Material Data Safety Sheets shall be available on site.

4.2 Plant

4.2.1 General obligations

In addition to Sub clauses 4.1 of SANS 1200 A and 4.3 of SANS 1200 D and/or Sub clause 4.1 of Specification T/AT, as applicable, all construction plant, tools and systems shall be in a safe working condition and shall be adequately maintained.

Plant shall be operated with due regard for the safety of those in its proximity.

All operators shall be physically and psychologically fit to operate their respective vehicles, mobile plant and cranes and to operate in their respective environments. They shall be in possession of a medical certificate of fitness.

4.2.2 Protective clothing and equipment

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Where appropriate employees and visitors shall be provided with the necessary and recommended protective clothing and equipment for free.

4.2.3 Construction vehicles and mobile plant

(see also Section 21 of the Construction Regulations)

Construction vehicles and mobile plant shall be equipped with an electrically operated acoustic signalling device and a reversing alarm.

A competent person shall be appointed to inspect, on a daily basis, prior to use, construction vehicles and mobile plant and shall record the findings of such inspections in a register.

The Contractor shall ensure that:

- a) no person rides on any construction vehicle or mobile plant other than in a safe place provided thereon for that purpose;
- b) operators and drivers follow demarcated routes and contain their operations within demarcated operating areas.

4.2.4 Formwork and support work

(see also Section 10 of the Construction Regulations)

A competent person shall be appointed in writing to the duty of supervising all formwork and support work operations. All formwork and support work structures shall be adequately designed, erected, supported, braced and maintained so as to support the loads they are to carry.

Formwork and support work equipment shall be examined and checked before use by the aforesaid competent person.

4.2.5 Scaffolding

(see also Section 14 of the Construction Regulations)

A competent person shall be appointed in writing to supervise all scaffolding operations.

All scaffold erectors, team leaders and inspectors shall be competent to carry out their respective tasks and work.

4.2.6 Radioactive sources

The use, care and storage of radioactive materials such as in nucleonic density testing machines shall conform to the requirements of the Hazardous Substances Act No. 15 of 1973 and its regulations. Such devices, except while being actively used by the operator, shall be safely secured.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4.2.7 Other items of plant

Plant not specifically referred to above shall be inspected, operated and maintained in a manner that assures the health and safety of all persons on the site. In particular, the requirements of the Construction Regulations shall be complied with in regard to:

- a) Boatswain's chairs: Section 16
- b) Material hoists: Section 17
- c) Batch plants: Section 18
- d) Explosive powered tools: Section 19
- e) Cranes: Section 20

4.3 Methods and procedures

4.3.1 Method statements

The Contractor shall submit with his health and safety plan, method statements detailing the storage, transport, handling, use and disposal of each hazardous substance to be used or brought on to site, including copies of the Material Data Safety Sheets referred to in 4.1.1.1 above.

The methods set out in these statements shall be implemented on site.

Such method statements shall be available on site.

4.3.2 Storage, stacking and use

4.3.2.1 General

In addition to Sub clause 4.2 of SANS 1200 A and/or Sub clause 3.8 of Specification T/AT, as applicable, a competent person shall be appointed in writing with the duty of supervising all storage and stacking operations. (See also Section 26 of the Construction Regulations).

Hazardous chemical substance, as defined in the Regulations for Hazardous Chemical Substances, used during construction shall be stored in secondary containers.

Flammable liquids shall be stored, used, and/or applied in a manner that would not cause a fire or explosion hazard. The Contractor shall ensure that in the vicinity of such materials:

- a) no person smokes,
- b) there is no open flame, and
- c) there is nothing that could cause an open spark. (See also Section 23 of the Construction Regulations).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The area in which materials that give off hazardous fumes are stored and/or used shall be effectively ventilated and every employee involved shall be provided with a suitable respirator, mask or breathing apparatus.

4.3.2.2 Explosives

Explosives shall be transported, stored and handled in accordance with the Explosives Regulations. (See also Sub clause 5.1.1.3 of SANS 1200 D, if applicable.)

4.3.2.3 Fuels and oils

The Contractor shall demarcate bulk fuel storage and refuelling areas and provide adequate security and control.

4.3.3 Signs

The Contractor shall display warning signs, in English, Afrikaans and Xhosa and any other relevant language used by the workforce, indicating the presence of any hazardous substance and at all storage areas.

4.3.4 Description of the Works

The Works and, if necessary, the temporary work required to construct the Works are described in the Specification Data and/or shown on the Drawings.

4.3.5 Existing conditions

The conditions existing on site are described in the Specification Data and/or shown on the Drawings.

4.3.6 Design information

Design information provided for safety planning purposes, such as design loads for structures, foundation conditions etc., is provided on the Drawings or in the Specification Data.

4.3.7 General obligations

In addition to Sub clause 5.7 of SANS 1200 A and/or Sub clauses 3.2 and 5.5.1 of Specification T/AT, as applicable. Safety Act (Act No. 85 of 1993) (OHS Act) and in particular with its Construction Regulations, 2014.

All the work included in this Contract shall, for the purpose of complying with the OHS Act and the Construction Regulations, be deemed to be "construction work".

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

In complying with the OHS Act and its Construction Regulations, the Contractor shall consider all aspects of the Works, necessary temporary work, such as traffic accommodation, and conditions existing on site, such as utility services, ground and foundation conditions, surrounding land use, pedestrian and vehicular traffic and anticipated weather conditions, and take into account the construction methods and materials to be used.

The Contractor shall take full responsibility for the prevention of unhealthy or unsafe working conditions and practices and for the promotion of a healthy and safe site and healthy and safe working practices on site.

The Contractor shall be responsible for the health and safety aspects of his subcontractors and shall have the responsibilities and carry out the duties towards his subcontractors that the Employer has towards the Contractor.

With a few exceptions, the Standard Specifications and the Specification Data are "end result specifications" and not "method specifications". As the methods of construction to be used are generally determined by the Contractor, detailed safety requirements applicable to all the operations to be carried out on Site are not provided in these documents. The Contractor shall apply all relevant safety regulations and requirements to the work methods he chooses and materials to be used.

The failure or refusal of the Contractor to comply with safety requirements or to take the necessary precautions for the health and safety of its employees and others on site as required by statutory authorities or as ordered by the Engineer, shall be sufficient cause for the reduction of payment of the relevant billed item and/or the suspension of payments under this Contract and/or for the Engineer to order a temporary halt of work within the affected areas until the specified or ordered requirement have been complied with to the satisfaction of the Engineer. No extension of time will be granted and any costs associated with such halt in construction or the provision of required or necessary precautions ordered by the Engineer shall be to the Contractor's expense.

4.3.8 Risk assessment

Before the commencement of any construction work and where necessary during construction work, the Contractor shall cause a risk assessment to be performed by a competent person appointed in writing. The risk assessment shall at least:

- a) identify, analyse and evaluate the risks and hazards to which persons may be exposed;
- b) include a plan of safe working procedures;
- c) include a plan for monitoring and review of the implementation of such working procedures and their effectiveness to mitigate, reduce or control the risks and hazards identified and observed during construction; and
- d) determine the need and frequency, if any, of instruction and training of employees during construction.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

As far as is reasonably practicable, ergonomic-related hazards shall be addressed in the risk assessment.

The Contractor's risk assessment shall be readily accessible to all persons on the Site at all times.

4.3.9 Health and safety plan

Without limiting his obligations and liabilities in terms of the Construction Regulations, 2014 of the OHS Act, the Contractor, in his health and safety plan to be submitted in terms of the Contract Data, shall inter alia deal with the safety provisions he will set up in respect of the aspects specified below.

After performing the risk assessment, the Contractor shall prepare the health and safety plan for approval by the Employer. The health and safety plan shall include, but not be limited to, the following:

The health and safety management structure including the names of all designated persons such as the Site Agent, the Construction (Health and) Safety Officer and all other specifically appointed persons, listing their knowledge, training experience and qualifications in the work for which they are appointed.

Health and safety method statements and procedures to be adopted to mitigate, reduce or control the risks and hazards that have been identified in the risk assessment and in the Specification Data and to ensure compliance with the OHS Act. Aspects to be dealt with shall include, if applicable:

- Control of the movement of construction vehicles;
- The storage, transport, stacking use and disposal of materials (in particular explosives, flammable liquids and materials that give off hazardous fumes);
- The use of tools, vehicles and plant;
- Public vehicular and pedestrian traffic accommodation measures;
- Security, access control and the exclusion of unauthorised persons;
- Temporary support structures;
- Dealing with working at height, including fall protection;
- Excavation work including potential collapse and slipping of excavated faces; Demolition work;
- Workshop activities, manufacture and maintenance work;
- The formation and operation of a health and safety committee on site; Medical fitness assessment of drivers and operators;
- Medical facilities and arrangements on site;
- Fire and emergency procedures;
- Commissioning and testing procedures;
- Induction and training of persons on and visiting the site;
- The provision and use of temporary services;
- Compliance with wayleaves, permissions and permits;

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Safety equipment, devices and clothing to be employed;
General housekeeping, site organisation and layouts to enhance safety;
Other specific aspects of work such as electrical installations and machinery, tunnelling, structures and working in water environments;
Emergency procedures (including fire precautions);
Procedures for reporting incidents, including standard forms for this purpose; Provision of welfare facilities;
The programme and format of inspections;
Arrangements for monitoring, control and auditing to ensure compliance with the health and safety plan;
Procedures for addressing non-compliance and remedial measures;
A periodic review of the health and safety plan.

The Contractor shall discuss the health and safety plan with the Employer or his/her appointed Agent with respect to health and safety matters or the Engineer and amend it as necessary in order to achieve approval.

The approved health and safety plan shall be implemented and maintained on the site for the duration of construction, and shall be readily accessible to all persons at all times.

4.3.10 Site establishment and management

4.3.10.1 Construction Safety Officer and other appointments

The Contractor shall appoint a competent employee in writing as his full-time or part-time Construction (Health and) Safety Officer to assist in the control of all safety related aspects on the site. Where practicable, the Construction (Health and) Safety Officer shall give input into the health and safety plan. Any such input shall be recorded in the health and safety file. The Construction (Health and) Safety Officer shall carry out regular and random checks of all parts of the site where work is taking place.

The Contractor shall appoint such other competent persons to specific roles as required elsewhere in this Specification and/or the Construction Regulations.

4.3.10.2 Safety of the general public

The Contractor shall be responsible for the safe and easy passage of public traffic past and/or over sections of roads and the site of which he has occupation. The Contractor shall take the necessary care at all times in all his operations and use of his equipment to protect the public and to facilitate the flow of pedestrian and vehicular traffic.

4.3.10.3 Barricading, etc.

Openings and edges where there is a risk of a person falling through or off shall be adequately guarded, fenced or barricaded. (See also Sub clause 5.1.1.1 of SANS 1200 D, if applicable.)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Excavations where the safety of persons may be endangered shall be adequately barricaded or fenced and shall be illuminated at night.

4.3.10.4 Signage

Routes followed by site vehicles and plant and operating areas shall be adequately signposted and demarcated.

Notices shall be conspicuously placed at all openings and edges where there is a risk of a person falling through or off same.

Warning signs shall be placed alongside exposed excavations and in which persons are working.

4.3.10.5 Access to the site

The Contractor shall ensure that access to the site is controlled and that all visitors to the site undergo health and safety induction pertaining to the hazards prevalent on the site and are provided with the necessary protective clothing and equipment.

4.3.10.6 Wayleaves, permissions and permits

The Contractor shall abide by the health and safety conditions imposed by any wayleaves, permissions or permits.

4.3.10.7 Reporting of infringements, improvements and incidents

The Contractor shall establish a procedure for the reporting of health and safety infringements and suggested improvements to the Construction (Health and) Safety Officer who shall record all such infringements and suggested improvements.

All incidents shall be reported strictly in accordance with the requirements of Section 24 of the OHS Act and the General Conditions of Contract.

4.3.10.8 Works committee

The Contractor shall establish a health and safety works committee on site. The committee shall comprise:

- a) Construction (Health and) Safety Officer;
- b) representatives of the contractor's supervisory staff;
- c) representatives of the various categories of the Contractor's workforce elected by the workforce.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

A member of the Engineer's staff, nominated by the Engineer shall be notified of meetings and shall be free to attend.

The Contractor shall ensure that no loss of payor benefits apply to any employee elected to the committee.

The functions of the health and safety works committee shall be to, inter alia:

- a) review, consider and report on any health and safety aspect on site, including health and safety procedures and method statements with the purpose of monitoring their effectiveness or shortcomings and to recommend changes where considered necessary;
- b) carry out regular inspections, review results and make recommendations where necessary;
- c) investigate unsafe practices.

The committee shall meet at regular intervals not exceeding one month. Minutes of the meetings shall be kept by the Contractor and copied to the Engineer within 10 days of each meeting.

4.3.10.9 Outbreak of illness

In the event of any outbreak of illness of a highly contagious or epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the relevant authorities.

4.3.10.10 First aid

The Contractor shall ensure that the necessary first aid facilities and emergency evacuation equipment is available on Site whenever persons are working on site.

Each foreman or work crew member shall be trained in first aid and shall possess a valid certificate to that effect issued by an accredited first aid training provider, within 3 months of their appointment.

4.3.10.11 Lighting and power circuits

All lighting and power circuits shall be fitted with earth leakage systems. Such systems shall be tested monthly and any circuit where the earth leakage system is malfunctioning shall be repaired immediately or removed and replaced with a satisfactory unit.

4.3.10.12 Lightning protection equipment

In areas where lightning is considered a hazard, the Contractor shall take precautions by the use of lightning protection equipment and earthing mats, all of which shall be properly designed and installed. Metalwork and conductors shall be properly earthed.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

No charging or blasting shall take place if lightning is forecast as being imminent. All charged areas shall be evacuated.

4.3.11 Training

All employees shall be trained in the tasks they are to perform and in use of the tools they are required to use.

All operators shall be trained in the use and operation of the plant they are required to operate.

Before any work commences and thereafter at such times as may be determined in the risk assessment, the Contractor shall ensure that all his employees on site are informed, instructed and trained by a competent person regarding the risks and hazards identified in the risk assessment and their related and other work procedures.

Every employee shall carry proof of his or her health and safety induction training.

Employees required to erect, move or dismantle formwork and support work shall have been adequately trained

4.3.12 Notification of construction work

Before carrying out any work the Contractor shall issue any applicable notification in terms of Section 3(1) of the Construction Regulations, i.e.:

- Working at a height of greater than 3 m,
- Use of explosives,
- Excavating deeper than 1 m,
- For contracts longer than 30 days or involving more than 300 person days.

4.3.13 Health and safety documentation

The Contractor shall provide and maintain on site a health and safety file. The health and safety file shall be made available upon request. The health and safety file shall contain a copy of:

- The completed notification form, if applicable, in terms of 4.2.4.9 above,
- the risk assessment in terms of 4.2.4.5 above,
- the approved health and safety plan prepared in terms of 4.2.4.6 above (including that of any subcontractors),
- a record of all drawings, designs and materials used etc.

On completion of construction the file shall be handed over to the Employer.

Where applicable, the Contractor shall maintain on site:

- a record of any input to the health and safety plan by the Construction (Health and) Safety Officer,

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- a comprehensive and updated list of all subcontractors on site including a copy of their agreements and the type of work being done,
- a register of the issuing and receipt of unspent and spent cartridges,
- a register of inspection of construction vehicles and mobile plant,
- a register of excavation and shoring inspections,
- records of fitness for and training of employees working at elevated positions,
- records of structure inspections by the designer,
- a register of formwork and support work inspections,
- findings of daily inspections of construction vehicles and mobile plant,
- a register of inspections of all temporary electrical installations and machinery,
- minutes of health and safety committee meetings.

4.3.14 Specific aspects of construction

Where applicable, the aspects in the following clauses shall be specifically addressed.

4.3.14.1 Fall protection

(see also Section 8 of the Construction Regulations)

For work where there is a fall risk, the Contractor shall:

- a) designate a competent person responsible for the preparation of a fall protection plan as part of the health and safety plan,
- b) employ on work at elevated positions only those who have been evaluated and shown to be physically and psychologically fit for such work,
- c) erect suitable fall prevention and, if necessary, fall arrest equipment.

4.3.14.2 Structures

(see also Section 9 of the Construction Regulations)

The Contractor shall take all reasonably practical steps to prevent the uncontrolled collapse of any new and existing structure, or part thereof, that may be temporarily weak or unstable due to construction work being carried out.

No structure shall be loaded in a manner that would render it unsafe.

4.3.14.3 Excavation work

(see also Section 11 of the Construction Regulations)

Without limiting his responsibility for the safety of his workers in any excavation, the Contractor shall ensure the safety of his workers in trenches and excavations deeper than 1.0m in terms of the provisions of the OHS Act. The Contractor may choose to batter excavations to a safe slope if sufficient space is available, or adequately shore the excavations.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

A competent person shall be appointed in writing to supervise the carrying out of all excavation work.

Before excavation work begins, the Contractor shall evaluate as far as is reasonably practicable, the stability of the ground.

The Contractor shall not permit or require any person to work in an excavation that has not been adequately shored or braced or the sides of which are not sloped to at least the maximum angle of repose.

Should the Contractor consider that an excavation is in stable material and consequently no shoring is required for that excavation, he shall provide to the Engineer, in terms of Sub-regulation 11 (3)(b)(ii)(a) a written statement to that effect signed by the competent person appointed in terms of Sub-regulation 11 (1).

Where the stability of an adjoining building, structure or road is likely to be affected by an excavation, the Contractor shall ensure that steps are taken to ensure the safety of the building, structure or road.

Every excavation, including all shoring and bracing, shall be inspected by the above competent person:

- a) daily, prior to each shift,
- b) after every blasting operation,
- c) after an unexpected fall of ground,
- d) after substantial damage to supports, and
- e) after rain.

The results of such inspections shall be recorded in a register.

A person who is competent in the use of explosives for excavation work, shall be appointed to develop a method statement in accordance with the applicable explosives legislation.

4.3.14.4 Demolition work

(see also Section 12 of the Construction Regulations)

Prior to any demolition work being carried out a detailed structural engineering survey of the structure to be demolished shall be carried out and the method of demolition shall be ascertained therefrom.

4.3.14.5 Tunnelling

(see Section 13 of the Construction Regulations)

4.3.14.6 Suspended platforms

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

(see Section 15 of the Construction Regulations)

4.3.14.7 Electrical installations and machinery

(see also Section 22 of the Construction Regulations)

A competent person shall be appointed to and shall inspect and control all temporary electrical installations and machinery.

4.3.14.8 Water environments

(see also Section 24 of the Construction Regulations)

Where construction work is carried out close to or over water, provision shall be made for preventing employees from falling into the water and for rescuing employees in danger of drowning. Employees shall be provided with and shall wear lifejackets.

4.3.14.9 Housekeeping

(see also Section 25 of the Construction Regulations)

4.3.14.10 Fire precautions

(see also Section 27 of the Construction Regulations)

Suitable and sufficient fire-extinguishing equipment shall be placed at strategic locations.

A competent person shall be appointed to and shall inspect at regular intervals, the fire extinguishing equipment.

A sufficient number of employees shall be trained in the use of the fire extinguishing equipment.

Where appropriate signs shall indicate fire escape routes.

4.3.14.11 Welfare provisions

(see also Section 28 of the Construction Regulations)

4.3.14.12 Small diameter shafts and test pits

Work in small diameter shafts and test pits shall comply with the Code of Practice: The Safety of Persons Working in Small Diameter Shafts and Test Pits for Civil Engineering Purposes, available from the South African Institution of Civil Engineers or the South African Association of Engineering Geologists.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4.3.15 Audits by the Employer

The Contractor shall permit the Employer to regularly audit, at an agreed interval, the implementation and maintenance of the approved health and safety plan and shall co-operate and provide all the required documentation, as may be required, in this regard.

As a result of such audits the Employer may order improvements to be made to the health and safety plan.

4.3.16 Variations

Should any variations be ordered or design amendments issued the Engineer will inform the Contractor of all the associated potential hazards to ensure that the health and safety aspects of the work ordered are taken into account.

5. COMPLIANCE WITH REQUIREMENTS

5.1 Testing

5.1.1 Fall protection

Fall protection equipment shall be tested for adequacy after erection.

5.1.2 Boatswain's chair

Each boatswain's chair shall be performance tested immediately after it has been erected.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
PAYMENT SYSTEM**

CONTRACT: RFP/01/2023-24

Part C4
Site Information

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MATJHABENG LOCAL MUNICIPALITY

**PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY
FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST-
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SITE INFORMATION

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END OF SECTION

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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

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT : RFP/01/2023-24

Section C4.1 Annexure: Site Information

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C4.1 SITE INFORMATION

- C4.1.1 LOCATION MAP** No specific location.
- C4.1.2 SURVEYS/BEACONS**

No claims will be entertained in connection with missing pegs or benchmarks. The Contractor shall be solely responsible for the protection of survey pegs after Site Handover.

C4.1.3 GEOTECHNICAL INFORMATION

General

No detailed site investigation was done to determine the sub soil (geotechnical) conditions.

Geological studies for Welkom generally depict soil strata, consisting Aeolian sand of variable thicknesses of alluvial soils and below, which is sand residual soils derived from mudstones shale and sandstones of the Beaufort Group. The underlying layer may consist fine to medium coarse grained ferruginous clayey, silty sand. Low density test result can be expected on the layers underlying the sandy material and these materials are therefore, also suspected to be potentially collapsible.

Contractors should take notice of OHS and Shoring and Protection due to excavation depths. Contactors must take note that excavation is for the size necessary as per SANS. Stepping for machine to reach depth is not measured and not payable. Stepping cost and moving of additional material is for Contractor's own account.

C4.1.4 HYDROLOGICAL INFORMATION

No detailed hydrological investigation was done.

C4.1.5 WARNING ON ACQUIRING OF MATERIAL

The Contractor is reminded that aggregates for concrete obtained from mining activities will not be allowed. Only material from commercial sources complying with the relevant specifications will be allowed.

C4.1.6 BORROW PIT INFORMATION

The Contractor will not be allowed to open up borrow pits.

C4.1.7 ACCESS TO SITE

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Access to the construction site will be obtained via roads.

C4.1.8 SITE SPECIFIC EIA REQUIREMENTS

The following additional mitigation measures must be adhered to, to ensure sound environmental practise during this project:

- C4.1.8.1 The erection of a construction camp and associated amenities is of serious environmental concern. If not done in accordance with the environmental management plan, this facility could lead to definite environmental damage. The building and operation of the construction camp should be done in accordance with the Occupational Health and Safety (OHS) Act regulations.
- C4.1.8.2 Movement of vehicles will increase disturbance. Certain areas to be shown to construction team will be regarded as no-go areas. These are the areas identified as environmental important sites.
- C4.1.8.3 The management of waste and waste products, including noise, must be done in accordance to the OHS plan, stipulated in the Occupational Health and Safety Act regulations.
- C4.1.8.4 Hazardous waste products must be dealt with in accordance with relevant legislation.
- C4.1.8.5 Construction activities generating dust must be mitigated by the use of water tankers to spray water over the gravel.
- C4.1.8.6 The sangars, walls and Iron Age kraals must not be seen and used as a ready and convenient source of building material
- C4.1.8.7 Only the trees that are a real problem in terms of causing damage to the completed works are to be removed. Should any of these trees be listed as protected species, the necessary permits should be obtained from the relevant authorities.
- C4.1.8.8 Measures as prescribed in the EMP must be adhered to.
- C4.1.8.9 The appointed safety officer, in terms of the OSH Act, must be held responsible for the enforcement of these mitigation measures. He will be responsible to inform all workers involved in the project about the environmental sensitive areas.

C4.1.9 ACCOMMODATION, WATER AND ELECTRICITY

- C4.1.9.1 Power Supply and other Services

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

C4.1.9.2 Contractor's Camp Site

The Contractor shall make his own arrangements for a suitable site for his camp and provide suitable facilities in his own offices for site meetings.

C4.1.9.3 Housing for Contractor's Employees

No housing is available for the Contractor's employees, and the Contractor shall make his own arrangements for housing his employees or transporting them to and from the site. The Contractor is in all respects responsible for the housing and transporting of his employees and for the arrangement thereof, and no extension of time due to any delays resulting from this, will be granted.

END OF SECTION

Contractor

Witness 1

Witness 2

Employer

Witness 1


Witness 2

MATJHABENG LOCAL MUNICIPALITY


PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24


APPENDIX A Tender Drawings




Contractor




Witness 1




Witness 2



Employer



Witness 1



Witness 2

MATJHABENG LOCAL MUNICIPALITY

PROVISIONING, INSTALLATION AND COMMISSIONING OF FULLY FUNCTIONAL AND INTEGRATED SMART METER PRE- AND POST- PAYMENT SYSTEM

CONTRACT: RFP/01/2023-24

LIST OF DAWINGS

INDEX

Drawing No.	Description
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Please see under specifications.

END OF SECTION

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2