



Sekhukhune
DISTRICT MUNICIPALITY

CIDB Category 7 CE or Higher

CONTRACT No. SK8/3/1-43/2022/23(WSIG)

FOR

WSIG FUNDED – MAEBE WATER INTERVENTION PHASE 4

PROCUREMENT DOCUMENT

NAME OF CONTRACTOR: _____

ADDRESS: _____

PHONE: _____

FAX: _____

CONTRACT AMOUNT: _____

Issued by	Prepared by
The Municipal Manager SEKHUKHUNE DISTRICT MUNICIPALITY Private Bag X 8611 Groblersdal 0470 Tel: (013) 262 7300 Fax: (013) 262 3688 Ms. M. Ntshudisane (Municipal Manager)	Engineerex (Pty) Ltd Building No3. Boardwalk Office Park Haymeadow Crescent Faerie Glen Pretoria 0043 Tel: (012) 999 4900 Contact Person: Ms Sharon Ramabulana

INVITATION TO BID

SEKHUKHUNE DISTRICT MUNICIPALITY

CONTRACTNUMBER: **SK8/3/1-43/2022/23(WSIG)** CLOSING DATE: **30 November 2022**. CLOSING TIME: 10:00am

DESCRIPTION: WSIG FUNDED – MAEBE WATER INTERVENTION PHASE 4

The successful bidder will be required to fill in and sign a written Contract Form (MBD 7.2).

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

AB Sikhosana Fire Station
 29 Van Riebeeck Street (R33)
 Groblersdal
 0470

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

The bid box is open 24 Hours.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) FOR CONSTRUCTION WORKS (3RD EDITION) (2015) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

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

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER CODE NUMBER

CELLPHONE NUMBER

FACSIMILE NUMBER CODE NUMBER

E-MAIL ADDRESS

VAT REGISTRATION NUMBER

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

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

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA).....☐

A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN ACCREDITATION SYSTEM (SANAS); OR
.....☐

A REGISTERED AUDITOR☐
[TICK APPLICABLE BOX]

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

ARE YOU THE ACCREDITED REPRESENTATIVE?
IN SOUTH AFRICA FOR THE GOODS / SERVICES / WORKS OFFERED? YES or NO

[IF YES ENCLOSE PROOF]

SIGNATURE OF BIDDER

DATE

CAPACITY UNDER WHICH THIS BID IS SIGNED

TOTAL BID PRICE TOTAL NUMBER OF ITEMS OFFERED

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Department: SUPPLY CHAIN
Contact Person: Mr. Voster Masemola
Tel: (013) 262 7669
E-mail address: masemolav@sekhukhune.gov.za

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Contact Person: ACTING DIRECTOR IWS
Tel: (013) 262 7300
E-mail address: ramadjek@sekhukhune.gov.za



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PART 1

THE TENDER

SECTION CONTENTS

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PART T1: TENDERING PROCEDURES

CONTRACT No: SK8/3/1-43/2022/23(WISG)

FOR

WSIG FUNDED – MAEBE WATER INTERVENTION PHASE 4

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T1.1 Tender Notice and Invitation to Tender

CONTRACT No: SK8/3/1-43/2022/23(WSIG)

FOR

WSIG FUNDED – MAEBE WATER INTERVENTION PHASE 4

Bids are hereby invited from experienced Contractors with a **CIDB Category 7CE or Higher** for the MAEBE WATER INTERVENTION PHASE 4 in the Sekhukhune District Municipality area of supply.

Bid documents will be available from Wednesday 26 October 2022 at Sekhukhune District Municipality cashiers' office, Bareki Mall Offices, Corner Van Riebeeck and Chris Wild Street, Groblersdal, 0470

There will be no site inspection for this project.

The Council also reserves the right to negotiate further conditions and requirements with the successful bidder.

Complete Bid document with attachments, fully priced and signed must be sealed in an envelope marked "CONTRACT No **SK8/3/1-43/2022/23(WSIG)**" Details of Bid "**MAEBE WATER INTERVENTION PHASE 4**": **Closing date 30 November 2022 at 10am** and should be deposited in the tender box at the **AB Sikhosana Fire Station**, 29 Van Riebeeck Street (R33), Groblersdal. The bid box is open 24 hours.

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

THIS BID IS SUBJECT TO THE GENERAL CONDITIONS OF CONTRACT (GCC) FOR CONSTRUCTION WORKS (3rd Edition) (2015).

Minimum specifications and other conditions are detailed in the bid document.

The Municipality shall adjudicate and award bids in accordance with B-BBEE status level of contribution on 80/20-point system, 80 points for the price and 20 points for contribution. Prospective bidders must accept that the bid will be adjudicated, according to the said legislation. Bids will remain valid for 90 (ninety) days.

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

Only bidders who are registered in the relevant contractor category in the Construction Industry Development Board Register of Contractors will be considered. This requirement will remain in force as long as it is a requirement of the CIDB. The project CIDB requirement 7 CE or Higher.

Only tenderers who can demonstrate that they will have in their employ staff which satisfy EPWP requirements during the contract validity are eligible to submit tenders

The Joint Ventures, all companies, which are part of the joint venture, must be registered with the CIDB. The company that meets the grading for the bid under consideration will be considered.

SEKHUKHUNE DISTRICT MUNICIPALITY

Private Bag X 8611
Groblersdal
0470
Tel: 013 262 7300
Fax: 013 262 3688

The evaluation of bids will be conducted in two stages. First stage is the assessment of functionality where after only bidders that obtained 70 points will be evaluated in terms of the price. 80/20 Preference point scoring system, where 80 points will be allocated for price only and 20 points will be allocated based on the Broad Based Black Economic Empowerment (B-BBEE) status level of contribution.

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Department: SUPPLY CHAIN
Contact Person: Mr. Voster Masemola
Tel: (013) 262 7669
E-mail address: masemolav@sekhukhune.gov.za

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Contact Person: ACTING DIRECTOR IWS
Tel: (013) 262 7300
E-mail address: ramadjek@sekhukhune.gov.za

The estimated contract duration for construction is 4 months.

MUNICIPAL MANAGER

SEKHUKHUNE DISTRICT MUNICIPALITY
Ms. M. NTSHUDISANE

SEKHUKHUNE DISTRICT MUNICIPALITY

Private Bag X 8611

Groblersdal

0470

Tel: 013 262 7300

Fax: 013 262 3688

T1.2 Tender Data

CONTRACT No: SK8/3/1- SK8/3/1-43/2022/23

FOR

WSIG FUNDED – MAEBE WATER INTERVENTION PHASE 4

SEKHUKHUNE DISTRICT MUNICIPALITY

CONTRACT No: SK8/3/1- SK8/3/1-43/2022/23(WSIG)

Tender Data

The conditions of tender are the Standard Conditions of Tender as contained in **Annex F** of the CIDB Standard for Uniformity in Construction Procurement.

(See)

http://www.cidb.org.za/Documents/KC/cidb_Publications/Stand_Codes_Other/Stand_codes_gg33239_28May2010.pdf which are reproduced without amendment or alteration for the convenience of tenderers as **Annexure F** to this Tender Data.

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.

The additional conditions of tender are:

Clause number	Tender Data
F.1.1	The employer is the Sekhukhune District Municipality , Office of the Municipal Manager

F.1.2 The tender documents issued by the employer comprise:

PART T1 TENDERING PROCEDURES

T1.1 Tender Notice and Invitation to Tender

T1.2 Tender Data.

Variations to the Standardised SANS 1914-1:2002 Specification

Annexure F: Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement

PART T2 RETURNABLE SCHEDULES

T2.1 List of Returnable Documents

T2.2 Returnable Schedules

PART C1 AGREEMENT AND CONTRACT DATA

C1.1 Form of Offer and Acceptance

C1.2 Contract Data

C1.3 Form of Guarantee

C1.4 CIDB Adjudicator's Appointment

PART C2 PRICING DATA

Clause number	Tender Data
	C2.1 Pricing Instructions C2.2 Bills of Quantities
	PART C3 SCOPE OF WORK
	C3.1 Project Scope of Works C3.2 Tender drawings
	PART C4 SITE INFORMATION
	C4.1 General information C4.2 Locality Plan
	PART C5 ANNEXURES
	C5.1 Ministerial Determination C5.2 SDM OHS Specification
F.1.4	The employer's agent is: Engineerex (Pty) Ltd Boardwalk Office Park Building No.3 Haymeadow Crescent Faerie Glen Pretoria 0043 Tel (012) 999 4900 Fax (012) 470 9185 Email: sharon@engineerex.co.za Contact: Ms, Sharon Ramabulana Cell: 076 470 9185
F.1.5.3	The Sekhukhune District Municipality is not bound to accept the lowest or any tender and reserves the right to accept the whole or any part of a tender.
F.2.1	Only those tenderers who are registered with the CIDB, or are capable of being so prior to the closure of tender, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 7 CE class of construction work, are eligible to submit tenders.
	Joint ventures are eligible to submit tenders provided that: a) Every member of the joint venture is registered with the CIDB; b) The lead partner has a contractor grading designation in the 7 CE or Higher class of construction work; and c) The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 7 CE or Higher class of construction work.
F.2.1.1	The CIDB grading given here is only a guideline. Contractors are required to be registered in the grading arising from the tender sum from the priced Bills of

Clause number	Tender Data
	<p>Quantities for their tenders to be considered responsive should the grading be found to be different.</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 works for labour-intensive competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders</p>
F.2.1.1.1	<p>Only those tenderers who have in their employ management and supervisory staff satisfying the requirements of the Scope of Work for labour intensive competencies for supervisory and management staff are eligible to submit tenders.</p> <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 works for labour-intensive competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders.</p>
F.2.1.2	<p>It is an absolute requirement that the taxes of the successful tenderer <u>must</u> be in order, or that suitable arrangements have been made with the Receiver of Revenue to satisfy them.</p> <p>The completed Form TCC001 (Refer Form A6 – Tax Clearance Certificate Requirements MBD2 in the List of Returnable) application must be submitted to the Receiver of Revenue who will then issue a Tax Clearance Certificate.</p> <p>If the Tax Clearance Certificate is found to be incorrect, the Supply Chain Management Office may, in addition to any other remedy it may have: -</p> <p>Recover from the Contractor all costs, losses or damages incurred or sustained by the State as a result of the award of the contract; and/or</p> <p>Cancel the contract and claim any damages which the State may suffer by having to make less favourable arrangements after such cancellation; and/or</p> <p>As provided for in the Supply Chain Management Office Regulation, impose on the Contractor a penalty not exceeding 5% of the value of the contract.</p> <p>Each party to a Consortium / Joint Venture / Sub-Contractors must attach their original Tax Clearance Certificate from the Receiver of Revenue.</p>
F.2.5.2	<p><i>Tenderers are hereby earnestly warned that, in terms of section 23(1) of the Roads Ordinance of Transvaal (Ordinance No. 22 of 1957, as amended), it is absolutely essential that the owners of property be advised accordingly.</i></p> <p>Unless the provisions of this section are strictly adhered to, the acquisition of material may be illegal and could result in a claim by the owner, inter alia that the property be restored to its original condition by the contractor.</p>
F.2.5.3	<p>Where reference is made to the standard specifications in the contract documents, it shall mean the SABS 1200 Standard Specifications for Civil Engineering Infrastructure.</p>
F.2.7	<p>The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.</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>A person who is suitably qualified and experienced to comprehend the implications of the work involved shall represent the tenderer at the site visit/information meeting. If the tenderer or his representative does not attend the site inspection/information meeting, the tenderer will be disqualified.</p>

Clause number	Tender Data
F2.10.5	The tendered rates and prices shall not be subject to Contract Price Adjustment.
F2 11.2	<p><u>Tenders submitted in accordance with these tender documents shall not have any qualifications.</u> Any point of difficulty of interpretation shall be cleared with the engineer as early as possible before submission of a tender. Should any query be found to be of significance, all tenderers will be informed accordingly by the engineer as early as possible</p> <p><u>Tenders shall not be qualified by the conditions of tender of the tenderer himself.</u> Failure to comply with this requirement may cause the tender to become invalid. Should the tenderer, notwithstanding the above, wish to make any amendment or qualification of the tender documents, such amendment or qualification shall be set out explicitly in full details on Form A4. Any qualification or amendment not set out on the prescribed form will not have any force and effect despite the fact that it may be contained elsewhere in the tender documents or in the covering letter to the tender. Any qualification or amendment appearing in or to be inferred from a program and submitted with any tender will not have any force and effect unless set out in writing in accordance with the above requirements.</p> <p><u>No alternative tender will be considered unless a tender that is unqualified and strictly according to the tender documents is also submitted.</u></p>
F.2.12	<p>If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent. 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>
F.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original, plus 0 copies.
F.2.13.4.1	A tender submitted jointly by two companies shall be accompanied by a copy of the document establishing the joint venture, registered and authenticated by an official who is authorized to witness sworn statements.
	The document shall clearly state the reason for the amalgamation, its period of validity and the persons who will represent it, how their assets will be legally obligated, and any further information that will explain the functions of the joint venture.

Clause number	Tender Data
F.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>Location of tender box: Sekhukhune District Municipality</p> <p>Physical address: AB SIKHOSANA FIRE STATION, 29 Van Riebeeck Street (R33), Groblersdal no later than 10:00am</p> <p>Identification details: The tenderer must clearly indicate the contents on the front of the envelope, with the following details:</p> <p>(i) CONTRACT No: SK8/3/1-43/2022/23(WSIG)</p> <p>(ii) The closing date: of the 30 November 2022</p> <p>(iii) The name and address</p> <p>of the tenderer.</p> <p>.....</p>
F.2.15.2	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F.2.16.1	The tender offer validity period is 90 days calculated from the tender closure date.
F.2.18	<p>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.</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</p>
F.2.19	<p>Access shall be provided for the following inspections, tests and analysis:</p> <p>i) Access to previously secured boreholes that will be connected to the rising main.</p> <p>ii) Site conditions of the works at Maebe</p>
F.2.20.1	The employer does not require any tender security, but the tenderers must note the terms contained in the contract data with regard to the forms of guarantee required for the due fulfilment of the contract.
F.2.23	<p>The tenderer is required to submit with his tender; proof of valid Contractor Registration issued by the Construction Industry Development Board; and an original valid Tax Clearance Certificate issued by the South African Revenue Services.</p> <p>Where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.</p> <p>Similarly, each partner in a Joint Venture is required to submit an original valid Tax Clearance Certificate in accordance with this requirement.</p>
F.3.4	Tenders will be opened immediately after the closing time for tenders at the Sekhukhune District Municipality ,
F.3.7.1	A tender that does not comply with the requirements in the tender documents and the instructions in the official tender advertisement will be rejected as being non-responsive bid.
F.3.11	<p>EVALUATION OF TENDER OFFERS</p> <p><u>Prequalification / Quality Criteria</u></p> <p>Tenderers will be assessed based on the prequalification criteria as set out in the table below. Tenderers scoring less than 70% will be considered non-responsive.</p>

Clause number Tender Data

Tenderers shall fill in the relevant information on the Prequalification / Quality Criteria Schedules in Part T2 and this information shall be used to award points for functionality on the following basis per category:

COMPANY EXPERIENCE													
(MAX 60 POINTS)													
<p>Failure to submit required FINAL COMPLETION CERTIFICATE will result in the bidder getting zero points (no Practical Completion Certificate will be accepted). Bidders to complete form D1 and attach proof of Final Completion Certificates.</p> <p>NB: Completion certificates must be signed by all parties namely: the Employer, Engineer and the Contractor (certificates that is not signed by ALL relevant parties will result in the bidder forfeiting points)</p>													
<p>Completed similar projects: Construction of water reticulation, and water bulk pipeline, and concrete structures with final completion certificates will be assessed as follows: (Max 60 points)</p> <table border="1"> <tbody> <tr> <td>5 or more similar project completed</td> <td>60 points</td> </tr> <tr> <td>4 similar projects completed</td> <td>50 points</td> </tr> <tr> <td>3 similar projects completed</td> <td>40 points</td> </tr> <tr> <td>2 similar projects completed</td> <td>30 points</td> </tr> <tr> <td>1 similar project completed</td> <td>20 points</td> </tr> <tr> <td>0 similar projects completed</td> <td>10 points</td> </tr> </tbody> </table>		5 or more similar project completed	60 points	4 similar projects completed	50 points	3 similar projects completed	40 points	2 similar projects completed	30 points	1 similar project completed	20 points	0 similar projects completed	10 points
5 or more similar project completed	60 points												
4 similar projects completed	50 points												
3 similar projects completed	40 points												
2 similar projects completed	30 points												
1 similar project completed	20 points												
0 similar projects completed	10 points												
KEY PERSON EXPERIENCE													
(MAX 20 POINTS)													
<p>Bidders must complete Form D3 attached in the bid document for key personnel and must clearly indicate <u>water and sanitation construction experience</u>, project, project description, duration and <u>contactable</u> references.</p> <p>NB: (Failure to complete Form D3 and submit certified copies will result in the key person obtaining zero points)</p> <p>Key personnel must be unencumbered, available full time and unique to this project</p>													
<p>CONTRACTS MANAGER: Must be permanently based on site for the duration of a project. A Construction Manager with Civil Engineering Experience, before and after professional registration, will be assessed as follows:</p> <p style="text-align: center;">(Max 10 points)</p>													

**Clause Tender Data
number**

5 Years or More Experience in Civil Engineering (with a Degree in Civil Engineering)	10 points
3 to 4 Years' Experience in Civil Engineering (with a Diploma in Civil Engineering)	6 points
Less than 3 Years' Experience in Civil Engineering	3 points

CONSTRUCTION MANAGER

With at least an undergraduate degree OR diploma qualification in Civil Engineering must be permanently based on the site for the duration of the project. The site Agent with Civil Engineering experience must, before or after qualification will be assessed as follows: (Attach certified copies of academic qualifications).

(Max 5 points)

5 Years or More Experience in Road Construction (Diploma in Civil Engineering)	5 points
3 to 4 Years of Experience in Civil Engineering (Certificate in Civil Engineering)	2 points
Less than 3 Years of Experience in Civil Engineering	1 point

SAFETY OFFICER:

Registered as a construction health and safety officer with SACPCMP with a minimum diploma qualification must be permanently based on the site for the duration of a project. The safety office with construction experience before and after professional registration, will be assessed based on the following:

(Max 5 points)

Registered with council SACPCMP	5 points
SAMPRAC	2 points

PLANT & EQUIPMENT

(MAX 10 POINTS)

BIDDERS must complete Form D2: Schedule of (Plant & Equipment)
(**Failure** to submit proof of ownership OR Letter of intent for Plant and Equipment hire is signed by both the lessee and the lessor will result in the bidder getting zero Points). It remains the Tenderers responsibility to evaluate the scope of works and list the required plant accordingly.

Clause number Tender Data

Plant that must be listed is as follows: (Max 10 points)	
TLB x 2	2 points
Crane Truck	2 points
Pedestrian Roller	1 point
Ride-on smooth drum compactor	1 point
Tipper Truck	2 points
Water Tanker	1 point
LDV	1 point

F3.11.3 The procedure for evaluation of responsive tender offers shall be:

Method 3: Financial Offer and Quality (Functionality) in full compliance with the employer's requirements as indicated in Part T2: Returnable Schedules.

F.3.8 Tender offers will only be accepted if:

- a) The tenderer has in his or her possession an **ORIGINAL VALID TAX CLEARANCE CERTIFICATE** issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations;
- b) The tenderer is registered with the **CONSTRUCTION INDUSTRY DEVELOPMENT BOARD** in an appropriate contractor grading designation and is not suspended;
- c) The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- d) The tenderer has not:
 - i) Abused the Employer's Supply Chain Management System; or
 - ii) Failed to perform on any previous contract and has been given a written notice to this effect; and
 - iii) Has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.

F.3.17 The number of paper copies of the signed contract to be provided by the employer is one (1).

**Clause
number**

Tender Data

F.3.19

TENDERER'S DIRECT PARTICIPATION OF TARGETED LABOUR JOB CREATION

In line with the National Government Policies and Strategies, the Department promotes the use of labour where feasible and hence specifies a minimum Job Creation content to ensure tenderers align with the development goals.

Minimum Job Creation Content for this contract is set at 1.25 Full Time Equivalent (FTE) Jobs per R'm Contract Price.

Labour Content

The minimum labour content for this project is 10%.

'The 10% represent the percentage of the contract value that would be used as wages for the local labour engaged on the project'

F.3.20

Contract Participation Goal

The Minimum Prescribed Contract Participation Goal for this Contract is **10%**

Annexure E: Examples of how contractors can fulfill their Contract participation goal obligations

SANS1914-1:2002 – PARTICIPATION OF TARGETED ENTERPRISES

The following examples illustrate the various ways in which contractors can fulfil their contract participation goal obligations. In the examples it is assumed that:

The value of the contract, exclusive of any value added tax or sales tax required by law, provisional sums and all allowances for escalation and contingencies, is R10 000 000; and the contract involves the construction of a building.

Contractors can tender a contract participation goal in a variety of ways, as illustrated below.

Contractor A

Contractor A, who is not a targeted enterprise:

Obtains professional services from a targeted enterprise for a fee of R100 000;

Purchases manufactured articles from a targeted enterprise manufacturer for the sum of R250 000;

Obtains supplies from a targeted enterprise supplier valued at R500 000; and

Subcontracts work to the value of R1 200 000 to a targeted enterprise subcontractor.

Value of credits = $100\,000 + 250\,000 + (0,5 \times 500\,000) + 1\,200\,000 = \text{R}1\,800\,000$

Credit = $1\,800\,000 / 10\,000\,000 \times 100 = 18,0\%$

Contractor A can tender a contract participation goal of 18 %

Contractor B

Contractor B, who is not a targeted enterprise:

Subcontracts 30 % of the contract to a non-targeted enterprise who in turn subcontracts R500 000 to a targeted enterprise; and

Subcontracts work to the value of R450 000 to a targeted enterprise subcontractor.

Value of credits = $500\,000 + 450\,000 = \text{R}950\,000$

Credit = $950\,000 / 10\,000\,000 \times 100 = 9,5\%$

Contractor B can tender a contract participation goal of 9,5 %.

Contractor C

Contractor C is a targeted enterprise but subcontracts 70 % of the work to non-targeted enterprises.

Value of credits = $(0,3 \times 10\,000\,000) + (0,1 \times 0,7 \times 10\,000\,000) = \text{R}3\,700\,000$

Credit = $3\,700\,000 / 10\,000\,000 \times 100 = 37\%$

Contractor C can tender a contract participation goal of 37 %.

Contractor D

Contractor D, who is not a targeted enterprise, enters into a joint venture with a targeted partner.

The targeted partner is responsible for work to the value of R2 500 000 (participation parameter of 0,25) of which at least 50 % is performed with resources independent of the non-targeted partner.

The joint venture obtains supplies from a targeted enterprise supplier valued at R1 000 000.

Value of credits = 2 500 000 + (0, 5 × 1 000 000) = R3 000 000

Credit = 3 000 000/10 000 000 × 100 = 30 %

Contractor D can tender a contract participation goal of 30 %.

Variations to the Standardised SANS 1914-1:2002 Specification

1 STATUS

The variations to the SANS 1914-1:2002 standardised specification are as set out below. Should any requirements of the variations conflict with other requirements of the SANS 1914-1:2002 specification, the requirements of the variation shall prevail.

2 PENALTIES (Clause 6)

Replace clause 6 with the following:

In the event that the Contractor fails to substantiate that any failure to achieve the Contract Participation Goal was due to quantitative under runs, the elimination of items, or any other reason beyond the Contractor's control which may be acceptable to the Employer, the Contractor may be required to pay to the Employer penalties (P) in an amount determined in accordance with the following formula:

$$P = 0,15 \times \frac{(D - D_o)}{(X - D_s)} \times A_v$$

Where,

D = tendered Contract Participation Goal percentage or "X", whichever is the lesser.

D_o = the Contract Participation Goal which the Employer's representative, based on the credits passed, certifies as being achieved upon completion of the Contract.

D_s = **20%** Minimum prescribed Contract Participation Goal for this Contract

A_v = Award Value

P = Rand value of penalty payable

X = 50% Maximum prescribed Contract Participation Goal for this Contract

Annexure F: Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement

F.1 General

F.1.1 Actions

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

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

Note:

A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

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

F.1.2 Tender Documents

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

F.1.3 Interpretation

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

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

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

a) Conflict of interest means any situation in which:

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

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

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

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

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

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

F.1.4 Communication and employer's agent

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

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

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

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

F.1.6 Procurement procedures

F.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.3.11 is the highest ranked or the tenderer scoring the highest number of

tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

F.1.6.2 Competitive negotiation procedure

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

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

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

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

F.1.6.3 Proposal procedure using the two stage-system

F.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

F.1.6.3.2 Option 2

F.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

F.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

F.2 Tenderer's obligations

F.2.1 Eligibility

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

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

F.2.2 Cost of tendering

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

F.2.3 Check documents

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

F.2.4 Confidentiality and copyright of documents

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

F.2.5 Reference documents

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

F.2.6 Acknowledge addenda

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

F.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may 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.

F.2.8 Seek clarification

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

F.2.9 Insurance

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

F.2.10 Pricing the tender offer

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

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

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

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

F.2.11 Alterations to documents

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

F.2.12 Alternative tender offers

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

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

F.2.13 Submitting a tender offer

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

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

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

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

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

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

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

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

F.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

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

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

F.2.15 Closing time

F.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

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

F.2.16 Tender offer validity

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

F.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

F.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.

F.2.16.4 Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".

F.2.17 Clarification of tender offer after submission

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

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

F.2.18 Provide other material

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

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

F.2.19 Inspections, tests and analysis

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

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

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

F.2.21 Check final draft

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

F.2.22 Return of other tender documents

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

F.2.23 Certificates

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

F.3 The employer's undertakings

F.3.1 Respond to requests from the tenderer

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

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

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

F.3.2 Issue Addenda

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

F.3.3 Return late tender offers

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

F.3.4 Opening of tender submissions

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

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

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

F.3.5 Two-envelope system

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

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

F.3.6 Non-disclosure

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

F.3.7 Grounds for rejection and disqualification

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

F.3.8 Test for responsiveness

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

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

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

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

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

F.3.9 Arithmetical errors, omissions and discrepancies

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

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

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

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

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

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

F.3.10 Clarification of a tender offer

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

F.3.11 Evaluation of tender offers

F.3.11.1 General

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

F.3.11.2 Method 1: Financial offer

In the case of a financial offer:

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

F.3.11.3 Method 2: Financial offer and preference

In the case of a financial offer and preferences:

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

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

where:

N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

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

F.3.11.4 Method 3: Financial offer and quality

In the case of a financial offer and quality:

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

formula:

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

where:

N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

c) Rank tender offers from the highest number of tender evaluation points to the lowest.

d) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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

F.3.11.5 Method 4: Financial offer, quality and preferences

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

a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.

b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula, unless otherwise stated in the Tender Data:

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

where:

N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

c) Rank tender offers from the highest number of tender evaluation points to the lowest.

d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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

F.3.11.6 Decimal places

Score financial offers, preferences and quality, as relevant, to two (2) decimal places.

F.3.11.7 Scoring Financial Offers

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

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

where:

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

W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.

A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

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

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

F.3.11.8 Scoring preferences

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

F.3.11.9 Scoring quality

Score each of the criteria and sub-criteria for quality in accordance with the provisions of the Tender Data. Calculate the total number of tender evaluation points for quality using the following formula:

$$N_Q = W_2 \times S_0 / M_S$$

where:

S_0 is the score for quality allocated to the submission under consideration;

M_S is the maximum possible score for quality in respect of a submission; and

W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

F.3.12 Insurance provided by the employer

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

F.3.13 Acceptance of tender offer

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

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

F.3.14 Prepare contract documents

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

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

F.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.15 Complete adjudicator's contract

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

F.3.16 Notice to unsuccessful tenderers

F.3.16.1 Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period.

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

F.3.17 Provide copies of the contracts

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

F.3.18 Provide written reasons for actions taken

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



PART T2: RETURNABLE SCHEDULES

CONTRACT No: SK8/3/1-43/2022/23 FOR WSIG FUNDED – MAEBE WATER INTERVENTION PHASE 4

SECTION CONTENTS

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SEKHUKHUNE DISTRICT MUNICIPALITY

T2.1 List of Returnable Documents

The tenderer must complete the following returnable schedules:

Notes to tenderer:

Returnable schedules have been separated into the following categories:

Forms, certificates and schedules for completion by the tenderer for use in the quantitative and qualitative evaluation of the tender (**Forms A-F**)

A list of other returnable documents for completion by the tenderer and which will subsequently be incorporated into the contract (Section C1: Agreement and Contract data)

Failure to fully complete all the relevant returnable documents may render such a tender offer unresponsive.

Tenderers shall note that their signature appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided.

Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a tenderer. If subsequently any information is found to be incorrect such discovery shall be taken as wilful misrepresentation by that tenderer to induce the contract. In such event the Employer has the discretionary right under contract condition 15.2 to terminate the contract.

Should a tenderer wish to offer a different period of completion than that required by the Employer, it shall be submitted as an alternative tender.

If more than one alternative tender is submitted, each one shall be numbered and submitted on a separate copy of form C1.1.1 Form of Offer, completed and signed, and accompanied by the prescribed priced Pricing Schedule and supporting documents.

A retention money guarantee will be considered for acceptance in lieu of cash deductions provided that the tenderer submits his proposal as an alternative tender indicating the discount he proposes to give.

These forms must be completed in black ink and any alterations made prior to tender closure countersigned by an authorised signatory.

TENDERERS ARE INSTRUCTED TO COMPLETE ALL THE SCHEDULES ATTACHED HEREIN. FAILURE TO COMPLETE ANY OF THE SCHEDULES WILL RESULT IN AUTOMATIC DISQUALIFICATION OF THE TENDER AS THE TENDER WILL BE CONSIDERED NOT RESPONSIVE. IF THE SCHEDULE IS NOT APPLICABLE TENDERERS ARE INSTRUCTED TO INDICATE NOT APPLICABLE AND SIGN THE SCHEDULE

T2.2 Returnable Schedules

The tenderer must complete the returnable documents as listed

Generic	Tick if completed
Authority for Signatory (<i>Compulsory</i>)	
Certificate of Authority for Joint Venture (<i>Compulsory where applicable</i>)	
Certified copy of identity documents for directors (<i>Compulsory</i>)	
Compulsory Enterprise Questionnaire-SCHEDULE 1C (<i>Compulsory</i>)	
Copy of Company Registration Documents or CK1 for Close Corporations (<i>Compulsory</i>)	
Form of offer to be properly signed (<i>Compulsory</i>)	
Declaration of Interest (MBD4) (<i>Compulsory</i>)	
Declaration of Bidder's Past Supply Chain Management Practices (MBD8) (<i>Compulsory</i>)	
Certified B-BEE Status Level Certificate SANAS approved or Sworn affidavit for BBBEE Exempted Micro Enterprises as per bidder's correct turnover category (<i>Required for evaluation</i>)	
Certificate of Independent Bid Determination (MBD9) (<i>Compulsory</i>)	
Declaration of Local Content (MBD 6.2 and Annex C) (<i>Compulsory if Applicable</i>)	
MBD5 (Required for evaluation) if tender exceed R10 million. Audited financial statements (<i>Compulsory</i>); if the bidder is required by law to prepare annual financial statements for auditing, their audited annual financial statements: for the past three years, or; since their establishment if established during the past three years; 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 30 days in accordance with regulation 21 (ii). (<i>Compulsory</i>) The Municipal rates for the bidder and its directors in respect of which payment is not overdue for more than 30 days or proof of lease agreement including rates for the landlord. In case where the Company or Director is registered in a rural area where the rates are not paid, please attach proof from Local Authority and Affidavit under oath indicating that there are no municipal rates payable. (<i>Compulsory</i>)	
Valid Tax Clearance Certificate Issued by the South African Revenue Service. (<i>Compulsory</i>) or PIN issued by SARS	
CSD Registration/CSD Summary Report (<i>Compulsory</i>)	
Proof of insurance with a registered financial services provider	

Note:

The meaning of the cursive type for each Form is as follows:

Compulsory: Documentation or Information that must be submitted with the tender (Failing to submit any if the document may result in the tender being deemed non-responsive).

Required for evaluation: Additional documentation that is required to be submitted with the tender and will be used as part of the tender evaluation.

FORM A1: CERTIFICATE OF ATTENDANCE AT SITE VISIT AND CLARIFICATION MEETING

Notes to Tenderer:

Unless the attendee's name, details and signature also appear on the attendance register this Certificate of Attendance shall not be accepted and the tenderer's offer shall be deemed non-responsive.

This is to certify that I,

.....

representative of (tenderer)

of (address)

.....

.....

telephone number

fax number

e-mail.....

attended the clarification meeting and visited the site on (date)

conducted by

in the presence of (Employer's representative)

TENDERER'S REPRESENTATIVE (Signature).....

EMPLOYER'S REPRESENTATIVE (Signature)

FORM A2: CERTIFICATE OF AUTHORITY FOR SIGNATORY

Notes to tenderer:

The signatory for the tenderer shall confirm his/her authority thereto by attaching on the tendering company's letterhead a duly signed and dated copy of the relevant resolution of the board of directors/partners.

In the event that the tenderer is a joint venture, a certificate is required from each member of the joint venture clearly setting out:

authority for signatory,

undertaking to formally enter into a joint venture contract should an award be made to the joint venture,

name of designated lead member of the intended joint venture, as required by tender condition F.2.13.4.

The resolution below is given as an example of an acceptable format for authorisation, but submission of this page with the example completed shall not be accepted as authorisation of the tenderer's signatory.

By resolution of the board of directors passed at a meeting held on

Mr/Ms ,
whose signature appears below, has been duly authorised to sign all documents in connection with the tender for

CONTRACT No: SK8/3/1- SK8/3/1-43/2022/23

: MAEBE WATER SUPPLY

and any contract which may arise therefrom on behalf of (*enter name of tenderer in block capitals*)

.....

SIGNED ON BEHALF OF THE COMPANY:

IN HIS/HER CAPACITY AS:

DATE:

SIGNATURE OF SIGNATORY:

WITNESS:

SIGNATURE

SIGNATURE

.....
NAME (PRINT)

.....
NAME (PRINT)

FORM A3: MBD 4: DECLARATION OF INTEREST**DECLARATION OF INTEREST**

1. No bid will be accepted from persons in the service of the state¹.

Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

- 3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Full Name of bidder or his or her representative:

3.2 Identity Number:

3.3 Position occupied in the Company (director, trustee, shareholder²):

3.4 Company Registration Number:

3.5 Tax Reference Number:

3.6 VAT Registration Number:

3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

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

3.8.1 If yes, furnish particulars.

.....

¹MSCM Regulations: "in the service of the state" means to be –
a member of –
any municipal council;
any provincial legislature; or
the national Assembly or the national Council of provinces;

a member of the board of directors of any municipal entity;
an official of any municipality or municipal entity;
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);
a member of the accounting authority of any national or provincial public entity; or
an employee of Parliament or a provincial legislature.

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

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

3.9.1 If yes, furnish particulars.....

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

3.10.1 If yes, furnish particulars.

.....
.....

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

3.11.1 If yes, furnish particulars

.....
.....

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

3.12.1 If yes, furnish particulars.

.....
.....

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

3.13.1 If yes, furnish particulars.

.....
.....

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

3.14.1 If yes, furnish particulars:

.....
.....

4. **FULL DETAILS OF DIRECTORS / TRUSTEES / MEMBERS / SHAREHOLDERS.**

Full Name	Identity Number	State Employee Number

4. **DECLARATION**

I, THE UNDERSIGNED (NAME)

CERTIFY THAT THE INFORMATION FURNISHED ABOVE IS CORRECT.

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

.....
Signature Date

.....
Position Name of bidder

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

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

1 Are you by law required to prepare annual financial statements for auditing?

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

***YES / NO**

.....

2 Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?

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

2.2 If yes, provide particulars.

.....

* Delete if not applicable

***YES / NO**

3 Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of

such contract?

3.1 If yes, furnish particulars

.....

.....

***YES / NO**

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?

***YES / NO**

4.1 If yes, furnish particulars

.....

.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

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

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

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

FORM A4: SCHEDULE OF VARIATIONS OR DEVIATIONS BY TENDERER

Notes to tenderer:

The postulated tender **MUST** be priced.

When submitting an alternative tender (including an alternative contract period), the contents of notes 5 and 6 under “Notes to tenderer” under Part T2: Returnable Schedules, shall be followed.

In addition, condition F.2.12 of Part T1.3: Tender Data, shall be followed when submitting an alternative/qualifying tender.

Page	Description

SIGNED ON BEHALF OF TENDERER:

FORM A5: SCHEDULE OF ADDENDA TO TENDER DOCUMENTS

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

	Date	Title or Details

SIGNED ON BEHALF OF THE TENDERER:

FORM A6: TAX CLEARANCE CERTIFICATE REQUIREMENTS

MBD 2

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

In order to meet this requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.

SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.

A Valid Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.

In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.

Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.

Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.



TAX CLEARANCE

TCC 001

Application for a Tax Clearance Certificate**Purpose**Select the applicable optionTenders ☐ Good standing ☐

If "Good standing", please state the purpose of this application

Particulars of applicant

Name/Legal name (Initials & Surname or registered name)	
Trading name (if applicable)	
ID/Passport no	Company/Close Corp. registered no
Income Tax ref no	PAYE ref no 7
VAT registration no 4	SDL ref no L
Customs code	UIF ref no U
Telephone no	Fax no
E-mail address	
Physical address	
Postal address	

Particulars of representative (Public Officer/Trustee/Partner)

Surname	
First names	
ID/Passport no	Income Tax ref no
Telephone no	Fax no
E-mail address	
Physical address	

Tender number

Estimated Tender amount R ,

Expected duration of the tender year(s)

Particulars of the 3 largest contracts previously awarded

Date started	Date finalised	Principal	Contact person	Telephone number	Amount

Are you currently aware of any Audit investigation against you/the company?.....

If "YES" provide details

YES NO

I the undersigned confirm that I require a Tax Clearance Certificate in respect of or .

I hereby authorise and instruct to apply to and receive from SARS the applicable Tax Clearance Certificate on my/our behalf.

Signature of representative/agent

- -

Date

Name of representative/agent

I declare that the information furnished in this application as well as any supporting documents is true and correct in every respect.

Signature of applicant/Public Officer

Name of applicant/
Public Officer

——

Date

1. It is a serious offence to make a false declaration.
2. Section 75 of the Income Tax Act, 1962, states: Any person who
 - (a) fails or neglects to furnish, file or submit any return or document as and when required by or under this Act; or
 - (b) without just cause shown by him, refuses or neglects to-
 - (i) furnish, produce or make available any information, documents or things;
 - (ii) reply to or answer truly and fully, any questions put to him ...As and when required in terms of this Act ... shall be guilty of an offence ...
3. **SARS will, under no circumstances, issue a Tax Clearance Certificate unless this form is completed in full.**
4. Your Tax Clearance Certificate will only be issued on presentation of your South African Identity Document or Passport (Foreigners only) as applicable.

FORM A7: CERTIFICATE OF INSURANCE COVER

Note to tenderer:

In the event of the tenderer being a joint venture/consortium the details of the individual members must also be provided.

The tenderer shall provide the following details of this insurance cover:

Name of Tenderer:

Period of Validity:

Value of Insurance:

Insurance for Works and Contractor's Equipment

Company:

Value:

Insurance for Contractor's Personnel

Company:

Value:

General public liability

Company:

Value:

SASRIA

Company:

Value:

SIGNED ON BEHALF OF THE TENDERER:

FORM A8: TENDERER'S BANK DETAILS

Notes to tenderer:

The tenderer shall attach to this form a letter from the bank at which he declares he conducts his account. The contents of the bank's letter must state the credit rating that it, in addition to the information required below, accords to the tenderer for the business envisaged by this tender. Failure to provide the required letter with the tender submission may render the tenderer's offer unresponsive in terms of tender condition F.3.8.

The tenderer's banking details as they appear below shall be completed.

In the event that the tenderer is a joint venture enterprise, details of all the members of the joint venture shall be similarly provided and attached to this form.

The tenderer shall provide the following:

Name of Account Holder:

Account Number:

Bank name:

Branch Number:

Bank and branch contact details

.....

(See Functionality Criteria – Bank Rating stamped by the bank)

SIGNED ON BEHALF OF THE TENDERER:

FORM A9: CERTIFICATE OF TENDERER'S LITIGATION HISTORY

Note to tenderer:

The tenderer shall list below details of any litigation with which the tenderer (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, and the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favour the award, if any, was made.

Client	Other litigating party	Dispute	Award value	Date resolved

SIGNED ON BEHALF OF THE TENDERER:

FORM A10: SCHEDULE OF CURRENT COMMITMENTS

Notes to tenderer:

The tenderer shall list below all contracts currently under construction or awarded and about to commence and tenders for which offers have been submitted but awards not yet made. In the event of a joint venture enterprise, details of all the members of the joint venture shall similarly be attached to this form.

The lists must be restricted to not more than 20 contracts and 20 tenders. If a tenderer's actual commitments or potential commitments are greater than 20 each, those listed should be in descending order of expected final contract value or sum tendered.

TABLE 1 CONTRACTS AWARDED				
Client	Project	Expected total value of contract (incl. VAT)	Duration (Months)	Expected completion date

(Attach copy of appointment letter as proof of current commitments)

SIGNED ON BEHALF OF THE TENDERER:

FORM A11: CERTIFICATE OF COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2003

Note to tenderer:

Discovery that the tenderer has failed to make proper disclosure may result in the Employer terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.

The tenderer shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

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 Contractors 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). YES / NO
How is this policy communicated to all employees?
.....
4. Does the Contractor keep records of safety aspects of each construction site? YES / NO
If yes, what records are kept?
.....
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? YES / NO
If yes, please explain his duties and provide a copy of his CV.
.....
.....
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? YES / NO
(If yes, provide a copy).

The Contractor shall attach to this page his understanding of the scope of works and include in the methodology his baseline Health and Safety Plan.

SIGNED ON BEHALF OF THE TENDERER:

FORM A12: CERTIFICATE OF REGISTRATION WITH CIDB

The tenderer shall provide a printed copy of the Active Contractor's Listing off the CIDB website. (www.cidb.org.za). In the case of a Joint Venture, a printed copy of the Active Contractor's Listing must be provided for each member of the Joint Venture.

Name of Contractor:

Contractor Grading Designation:.....

CIDB Contractor Registration Number:

SIGNED ON BEHALF OF THE TENDERER:

**FORM A14: ORIGINAL CERTIFIED COPIES OF DIRECTORS / MEMBERS / TRUSTEES
IDENTITY DOCUMENTS**

The tenderer shall attach to this page **original certified** copies of the directors / members trustee's identity documents of the tendering entity.

In the case of joint ventures, the required documents shall be submitted for each member of the joint venture.

SIGNED ON BEHALF OF THE TENDERER:

FORM A15: COPIES OF COMPANY REGISTRATION DOCUMENTS

The tenderer shall attach to this page copies of the registration documents of the tendering entity.

Any of the following documents for the tendering entity is sufficient:

CK1: Founding Statement for a Close Corporation.

CK2: Amended founding statement for a Close Corporation.

CM1: Certificate of Incorporation for a company.

CM2: Memorandum of Association for a company.

CM9: Certificate of Change of name for a company.

Trust Deed and Letter of Authority to Act as Trustees certified by the High Court.

In the case of joint ventures, the required documents shall be submitted for each member of the joint venture.

FORM A16: COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, **separate** enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of enterprise

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Tax reference number

Section 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 shareholder 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 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	<input type="checkbox"/> 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) <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity <input type="checkbox"/> an employee of Parliament or a provincial legislature
---	---

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

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

*insert separate page if necessary

Section 7: Record of spouses, children and parents in the service of the state

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

a member of any municipal council a member of any provincial legislature a member of the National Assembly or the National Council of Province a member of the board of directors of any municipal entity an official of any municipality or municipal entity	<input type="checkbox"/> 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) <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity <input type="checkbox"/> an employee of Parliament or a provincial legislature
---	---

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise:

- i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed		Date	
Name		Position	
Enterprise name			

SIGNED ON BEHALF OF THE TENDERER:

FORM A17: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE

The tenderer shall provide a printed copy of the Active Supplier Listing on the National Treasury Central Supplier Database. (www.treasury.gov.za). Tenderers who are not registered on the Central Supplier Database should attach proof of their application for. In the case of a Joint Venture, a printed copy of the Active Supplier Listing must be provided for each member of the Joint Venture.

Name of Contractor:

Central Supplier Database Supplier Number:

Supplier Commodity:

Delivery Location:

SIGNED ON BEHALF OF THE TENDERER:

FORM C1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

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

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

GENERAL CONDITIONS

The following preference point systems are applicable to all bids:

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

The value of this bid is estimated to not exceed R 50 000 000 (all applicable taxes included) and therefore the 80/20 system shall be applicable.

Preference points for this bid shall be awarded for:

Price; and

B-BBEE Status Level of Contribution.

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

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

1.5 Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate or, if required, a Consolidated Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or a sworn affidavit confirming annual turnover and level of black ownership in case of an EMEs and QSE together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

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

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003) as amended by Act No 46 of 2013
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. ADJUDICATION USING A POINT SYSTEM

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

4. POINTS AWARDED FOR PRICE

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

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

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) & \text{or} & P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \end{array}$$

Where

Ps = Points scored for price of tender under consideration.
Pt = Price of tender under consideration; and
Pmin = Price of lowest acceptable tender.

Points awarded for B-BBEE Status Level of Contribution

5.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, 2017, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

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

5.2 Bidders must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.

5.3 EMEs and 51% black owned QSEs must submit a Valid B-BBEE Affidavit as prescribed by the B-BBEE Act.

5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, A provided that they submit a Consolidated B-BBEE Certificate issued by one of the bodies mentioned in 5.2 above.

5.5 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.

5.6 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level contributor than the bidder concerned, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.

5.7 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. BID DECLARATION

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

7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3 AND 5.1

7.1 B-BBEE Status Level of Contribution..... = (maximum of 20 points)
(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of an Affidavit or a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).

8 SUB-CONTRACTING

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

8.1.1 If yes, indicate:

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

.....%

(ii) the name of the sub-contractor.....

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

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

9 DECLARATIONS WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm

9.2 VAT registration number :

9.3 Company registration number

9.4 TYPE OF COMPANY/ FIRM

[TICK APPLICABLE BOX]

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

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

9.6 COMPANY CLASSIFICATION

[TICK APPLICABLE BOX]

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

[TICK APPLICABLE BOX]

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

.....

9.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBEE status level of contribution indicated in paragraph 7 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct.
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct.
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –

(a) disqualify the person from the bidding process.

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct.

cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation.

recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining

business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and forward the matter for criminal prosecution

WITNESSES:

<p>WITNESSES</p> <p>1.</p> <p>2.</p>	<p>..... SIGNATURE(S) OF BIDDERS(S)</p> <p>DATE:</p> <p>ADDRESS</p> <p>.....</p> <p>.....</p>
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THE TENDERERS BBBEE CERTIFICATE SHOULD BE ATTACHED TO THIS PAGE

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9. (1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

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

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

1.6. A bid may be disqualified if –

- (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
- (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

2.1. **“bid”** includes written price quotations, advertised competitive bids or proposals;

2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);

2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state.

2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).

2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;

2.7. **“local content”** means that portion of the bid price, which is not included in the imported content, provided that local manufacture does take place;

2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and

2.9. **“sub-contract”** means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Steel products and components for construction	100%
Pumps and medium voltage motors	70%
Plastic pipes and fittings	100%

4. Does any portion of the services, works or goods offer have any imported content?

(Tick applicable box)

YES		NO	
-----	--	----	--

- 4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

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

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?

(Tick applicable box)

YES		NO	
-----	--	----	--

- 5.1. If yes, provide the following particulars:

- (a) Full name of auditor:
- (b) Practice number:
- (c) Telephone and cell number:
- (d) Email address:

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)

6. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

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

IN RESPECT OF BID NO.

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

.....

NB

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

2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thedti.gov.za/industrialdevelopment/ip.jsp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

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

(a) The facts contained herein are within my own personal knowledge.

(b) I have satisfied myself that

- (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (ii) the declaration templates have been audited and certified to be correct.

(c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

(d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

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

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

(C1)	Tender No.
(C2)	Tender description:
(C3)	Designated product(s)
(C4)	Tender Authority:
(C5)	Tendering Entity name:
(C6)	Tender Exchange Rate:
(C7)	Specified local content %

Note: VAT to be excluded from all calculations

Pula

EU

GBP

[illegible]

Annex D

Imported Content Declaration - Supporting Schedule to Annex C

(D1) Tender No.		Note: VAT to be excluded from all calculations
(D2) Tender description:		
(D3) Designated Products:		
(D4) Tender Authority:		
(D5) Tendering Entity name:		
(D6) Tender Exchange Rate:	Pula <input type="text"/> EU <input type="text"/> R 9.00 GBP <input type="text"/> R 12.00	

A. Exempted imported content

Calculation of imported content										Summary	
Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
(D19) Total exempt imported value										R 0	

This total must correspond with Annex C - C 21

B. Imported directly by the Tenderer

Calculation of imported content										Summary	
Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
(D32) Total imported value by tenderer										R 0	

C. Imported by a 3rd party and supplied to the Tenderer

Calculation of imported content										Summary	
Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported value
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
(D45) Total imported value by 3rd party										R 0	

D. Other foreign currency payments

Calculation of foreign currency payments					Summary of payments	
Type of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange	Local value of payments	
(D46)	(D47)	(D48)	(D49)	(D50)	(D51)	
(D52) Total of foreign currency payments declared by tenderer and/or 3rd party						

Signature of tenderer from Annex B

(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above R 0

Date: _____

This total must correspond with Annex C - C 23

Annex E

Local Content Declaration - Supporting Schedule to Annex C

(E1)	Tender No.	
(E2)	Tender description:	
(E3)	Designated products:	
(E4)	Tender Authority:	
(E5)	Tendering Entity name:	

Note: VAT to be excluded from all calculations

Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
	(E6)	(E7)	(E8)
(E9) Total local products (Goods, Services and Works)			R 0

(E10) **Manpower costs** (Tenderer's manpower cost) R 0

(E11) **Factory overheads** (Rental, depreciation & amortisation, utility costs, consumables etc.) R 0

(E12) **Administration overheads and mark-up** (Marketing, insurance, financing, interest etc.) R 0

(E13) Total local content R 0

This total must correspond with Annex C - C24

Signature of tenderer from Annex B

Date: _____

FORM C2: TENDERER'S DIRECT PARTICIPATION OF TARGETED LABOUR JOB CREATION

1. Definitions

Targeted Labour

Individuals, employed by the contractor in the performance of the contract, who are defined as the target group in the contract and who permanently reside in the target area or who are recognized as being residents of the target area on the basis of identification and association with and recognition by the residents of the target area

Target Group

For this project the contract does not specify the target group based on gender, age or disability. However, specifically excluded from the Target Group is the contractor's own staff unless such staff are also from the Target Area.

Target Area

For this project, the target area is defined as: Maebe, Sekhukhune District Municipality, Limpopo Province

2. Supporting Targeted Labour / Job Creation Calculation

The Tenderer must complete the table below to reflect the anticipated jobs created in completing this Contract.

The minimum Job Creation content is as specified in Clause F.3.19 of the Tender Data.

Row No.	Description	A	B	C	D
		No. persons to employ	No. Days Employed	No. Labour Days (A x B)	No FTE Jobs to Create (C/230)
1	Unskilled Labourers				
2	Semi-skilled Labourers				
3	Skilled Site Personnel (Operators, Section Leaders, Etc.)				
4	Skilled Office Personnel (Clerks, Safety Agents, Lab Staff)				
5	Site Management Personnel				
6	Off Site Office Personnel				
7	Other (Specify)				
8	Other (Specify)				
9	TOTAL (Sum Rows 1 to 8)				*
10	TOTAL Tendered Contract Price (from Form of Offer and Acceptance)				
11	Contractual Number of FTE Jobs to Create ((Row 10 / 1,000,000) x 1.25)				

Notes

* This amount should be greater than or equal to the amount in Row 11.

The tender will be non-responsive if the minimum job creation content is not achieved.

The above information will be monitored by the Engineer during the construction phase. This undertaking by the Contractor will be part of the minimum Procurement Targets and penalties for non-conformance will be calculated according to those specified in the Tender Data.

SIGNED ON BEHALF OF THE TENDERER:

FORM C3: CONTRACT PARTICIPATION GOALS FOR TENDERER'S DIRECT PARTICIPATION OF TARGETED ENTERPRISES

Definitions

The following definitions shall apply to this schedule:

Targeted Enterprise

Enterprises who are based in the Limpopo Province, shall contribute **10%** of the contract value.

Targeted Partners

No targeted partners have been defined for the contract.

Conditions associated with the construction participation goals (CPG)

The tenderer, undertakes to:

engage one or more targeted enterprise in accordance with the provisions of the SANS 1914 -4 as varied in sections 3 hereunder;

deliver to the Employer, within 5 working days of being requested in writing to do so, a completed Joint Venture Disclosure Form (Annex D of SANS 1914-1) and a joint venture agreement, should a joint venture be proposed at prime contract level with Targeted Partners to satisfy Contract Participation Goal undertakings

deliver to the Employer, within 5 working days of being requested in writing to do so, a targeted Enterprise Declaration Affidavit in respect of all Targeted Enterprises engaged at prime contract level to satisfy Contract Participation Goal undertakings.

accept the sanctions set out in Section 4 below should such conditions be breached;

complete the Contract Participation Goal commitment form contained in Section 5 below; and

complete the Supporting Contract Participation Goal Calculation contained in Section 6 below.

Variation to the targeted construction procurement specification SANS 1914-4

The variations to SANS 1914-4 are set out below. Should any requirements of the variations conflict with requirements of SANS 1914-4 the requirements of the variations shall prevail.

Points for maximum and minimum contract participation goals shall be as set out in clause D1003 of the contract document. Calculations of the contract participation goals shall be based as a % of targeted enterprises costs of the Net Amount (N_A) and not calculated in accordance with methods 1 or 2 in Annexure A of SANS 1914-4.

Sanctions

In the event that the tenderer fails to substantiate that any failure to achieve the Contract Participation Goal was due to quantitative under runs, the elimination of items, or any other reasons beyond the Contractor's control which may be acceptable to the Employer, it shall be liable to pay to the Employer a financial penalty calculated in the following manner:

$$P = 0,50 \times \frac{(D-D_0)}{(100)} \times N_A$$

Where D = tendered Contract Participation Goal percentage.

D₀ = the Contract Participation Goal which the Employer's representative based on the credits passed, certifies as being achieved upon completion of the contract.

N_A = Net Amount

P = Rand value of penalty payable

Contract Participation Goal in respect of targeted enterprises

I/We hereby tender a Contract Participation Goal of%.

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the tenderer confirms that he/she understands the conditions under which such Contract Participation Goals are approved and confirms that the tender satisfies the conditions pertaining to Contract Participation goals for direct participation of targeted enterprises.

Signature:

Name:

Duly authorized to sign on behalf of:

Telephone:

Fax:

Supporting contract participation goal calculation

SCHEDULE ITEM NO	NAME OF SMME/BE	ITEM DESCRIPTION/GOODS AND SERVICES TO BE PROVIDED	VALUE (RANDS)
Total			
Tender Sum(N _A)			
% of Tender Sum			

SIGNED ON BEHALF OF THE TENDERER:

FORM C4: JOINT VENTURE COMMITMENT

Tenderers who are Joint Ventures shall complete this form.

The commitment and type of work to be performed by the joint venture partner(s) shall be entered into the table below:

JOINT VENTURE COMPANY NAME(S)	VALUE OF WORK TO BE ASSIGNED (R VALUE)	NATURE OF WORK TO BE ASSIGNED	PROPORTION HOLDING IN JV AGREEMENT (%)

JOINT VENTURES SHALL ATTACH THEIR JOINT VENTURE AGREEMENT TO THIS PAGE

SIGNED ON BEHALF OF THE TENDERER:

FORM D1: SCHEDULE OF WORK EXPERIENCE

Note to tenderer:

The tenderer shall enter in the spaces provided below a complete list of the last ten civil-engineering contracts with the focus being water and sanitation orientated, awarded to him. This information is deemed to be material to the award of the contract.

Employer	Engineer *	Nature of Works	Value of Works	Duration and Completion Date

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

SIGNATURE OF TENDERER:

DATE:

* State firm, contact person and telephone number.



FORM D2: SCHEDULE OF CONTRACTOR'S EQUIPMENT

Note to tenderer:

State with relevant symbol in the availability column.

The tenderer shall state below what constructional plant will be immediately available for this contract, what constructional plant will become available by virtue of outstanding orders, and what further constructional plant will be acquired or hired for the work should he be awarded the contract.

CONSTRUCTIONAL PLANT IMMEDIATELY AVAILABLE (I)

CONSTRUCTIONAL PLANT ON ORDER (O)

(State details of arrangements made, with delivery dates)

CONSTRUCTIONAL PLANT THAT WILL BE ACQUIRED OR HIRED (H)

(State details of delivery arrangements)

DESCRIPTION, SIZE, CAPACITY	NUMBER	AVAILABILITY (I) (O) (H)

SIGNED ON BEHALF OF TENDERER:

FORM D3: SCHEDULE OF CONTRACTORS KEY PROJECT PERSONNEL

The tenderer shall state below what project personnel will be available for this contract and what additional personnel will be employed for the work should he be awarded the contract.

As required more than a single individual should be proposed per position, based on the size of the project and the required personnel.

Any additional supporting documentation to substantiate the proposed personnel should be attached to this page.

POSITION	NAME	QUALIFICATIONS (State the Institution, Qualification Obtained and Year Obtained)	NO. YEARS OF RELEVANT EXPERIENCE (Indicate the number of years of Civil or Building experience and key expertise)
CONTRACT MANAGER			
CONSTRUCTION MANAGER			
SAFETY OFFICER			
OTHER (Specify)			
OTHER (Specify)			
OTHER (Specify)			
OTHER (Specify)			

SIGNED ON BEHALF OF TENDERER:

FORM D4: SCHEDULE OF SPECIALIST SUBCONTRACTORS

With regard to sub-clause 4.4 of the General Conditions of Contract:

Note to tenderer:

The tenderer shall list below the specialist items of work on this contract. Alternatives may be mentioned.

The tenderer shall state whether he intends to carry out any specialised work himself.

Acceptance of this tender shall not be construed as approval of all or any of the listed specialist subcontractors. Should any or all of the specialist subcontractors not be 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, even in the event of a subcontractor not listed below being approved by the engineer.

SPECIALISED ITEM	NAME OF SPECIALIST SUBCONTRACTOR

SIGNED ON BEHALF OF TENDERER:

FORM D5: INDICATIVE CONSTRUCTION PROGRAMME

Note to tenderer:

The tenderer shall attach a preliminary programme, reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this contract. The programme shall be in accordance with the information provided in form D2: Schedule of contractor's equipment, form D5: Schedule of estimated monthly expenditure, and with all other aspects of the tender.

SIGNED ON BEHALF OF TENDERER:.....

FORM D6: SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE

Note to tenderer:

If a tenderer wishes to submit an alternative tender then this form, appropriately completed, shall be attached to the Pricing Schedule for the alternative proposal.

The tenderer shall state his estimated value of the work to be completed every month, based on his preliminary programme and his tendered unit rates, in the table below.

MONTH	VALUE
1	R
2	R
3	R
4	R
5	R
6	R
7	R
FINAL*	R
TOTAL: R	

* Final payment at end of Defects Notification Period is for balance of retention and any other payments due.

SIGNED ON BEHALF OF TENDERER:

FORM E1: QUALITY ASSURANCE

The tenderer shall attach to this Form sufficient details from his Quality Assurance Plan to indicate the processes and policies to be adopted to ensure that the required specifications of the works are achieved during construction.

The Quality Assurance Plan to be submitted to the Engineer after award shall include that of any subcontractors (if applicable).

The minimum details to be given with this tender shall include (where applicable):

TESTING (WHICH TESTS, POINT/S OF TESTING, FREQUENCY)

MANUFACTURE, TRANSPORT, CONSTRUCTION

PERSONNEL EMPLOYED ON ALL ACTIVITIES AND QUALITY CONTROL

ANY OTHER MATTERS WHICH RELATE TO THE QUALITY ASSURANCE PLAN WHICH THE TENDERER CONSIDERS MAY BE OF ASSISTANCE IN TENDER ADJUDICATION

SIGNED ON BEHALF OF TENDERER:

FORM F1: 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)

I hereby undertake to render services described in the attached bidding documents to **Sekhukhune District Municipality**, in accordance with the requirements and task directives / proposals specifications stipulated in **CONTRACT No: SK8/3/1-43/2022/23**

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.

The following documents shall be deemed to form and be read and construed as part of this agreement:

Bidding documents, viz.

Invitation to bid;

Tax clearance certificate;

Pricing schedule(s);

Filled in task directive/proposal;

Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;

Declaration of interest;

Declaration of bidder's past SCM practices;

Certificate of Independent Bid Determination;

Special Conditions of Contract;

General Conditions of Contract; and

Other (specify)

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.

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.

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

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

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES

1

2

DATE:

CONTRACT FORM - RENDERING OF SERVICES

PART 2 (TO BE FILLED IN BY THE PURCHASER)

I..... in my capacity

as.....accept your bid under reference number

CONTRACT No:SK8/3/1-43/2022/23 dated.....for the rendering of services

indicated hereunder and/or further specified in the annexure(s).

An official order indicating service delivery instructions is forthcoming.

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.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)
MAEBE WATER SUPPLY				

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

SIGNED ATON.....

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

--

WITNESSES

1

2

DATE:

FORM F2: DECLARATION OF BIDDERS PAST SUPPLY CHAIN MANAGEMENT PRACTICES

This Standard Bidding Document must form part of all bids invited.

It serves as a declaration to be used by institutions 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.

The bid of any bidder may be disregarded if that bidder, or any of its directors have-
abused the institution's supply chain management system;
committed fraud or any other improper conduct in relation to such system; or
failed to perform on any previous contract.

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

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

Item	Question	Yes	No
4.4.1	If so, furnish particulars:		
4.5	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"/>
4.5.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

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

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

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

FORM F3: CERTIFICATE OF INDEPENDENT BID DETERMINATION

This Standard Bidding Document (MDB) must form part of all bids¹ invited.

2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.

3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:

- a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
- b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.

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.

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.*

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

CONTRACT No:SK8/3/1-43/2022/23- MAEBE WATER INTERVENTION PHASE 4 in response to the invitation for the bid made by:

SEKHUKHUNE DISTRICT MUNICIPALITY

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

I certify, on behalf of: _____ that:

(Name of Bidder)

I have read and I understand the contents of this Certificate;

I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;

I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;

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;

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

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.

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.

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

prices;

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;
- (f) or bidding with the intention not to win the bid.

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.

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.

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

PART 2
THE CONTRACT

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PART C1: AGREEMENT AND CONTRACT DATA

CONTRACT No: SK8/3/1-43/2022/23

CIDB Category 7 CE or Higher

FOR

WSIG FUNDED MAEBE WATER SUPPLY

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C1.1: Form of Offer and Acceptance

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

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

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of: Contract No: **SK8/3/1-43/2022/23 for the Maebe Water Intervention Phase 4**

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

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

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

.....

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

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

Signature(s)

Name(s)

Capacity

**for the
Tenderer**
(Name and address of organization)

**Name &
signature of
Witness** **Date**

CIDB Registration Number

Acceptance

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

The terms of the contract, are contained in:

Part C.1	Agreements and contract data, (which includes this agreement)
Part C.2	Pricing data
Part C.3	Scope of work.
Part C.4	Site information
Part C.5	Annexures
Part C.6	Variation to Standard Specifications

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 6 above.

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

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

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

Signature

Name

Capacity

**for the
Employer**
(Name and address of organization)

**Name &
Signature of
Witness** **Date**

Schedule of Deviations

1 Subject _____

Details _____

2 Subject _____

Details _____

3 Subject _____

Details _____

4 Subject _____

Details _____

5 Subject _____

Details _____

6 Subject _____

Details _____

7 Subject _____

Details _____

8 Subject _____

Details _____

9 Subject _____

Details _____

10 Subject _____

Details _____

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

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

C1.1.2 Form of Agreement in terms of the Mine Health and Safety Act, (Act No. 29 of 1996) as amended by the Mine Health and Safety Amendment Act (Act No. 72 of 1997) and the Mineral Resources and Petroleum Development Act (Act No. 28 of 2002)

THIS AGREEMENT made at on this the day of in the year between the *Sekhukhune District Municipality*, (hereinafter) called "the Employer" of the one part, herein represented by in his capacity as and delegate of the Employer in terms of the Employer's standard powers of delegation pursuant to the provisions of Act No. 7 of 1998 and in his capacity as the Contractor and being duly authorised by virtue of a resolution appended hereto as **ANNEXURE A**.

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

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

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

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

SIGNED ON BEHALF OF THE EMPLOYER

AS WITNESS:

.....

(Signature)

NAME (Print)... ..

SIGNED ON BEHALF OF THE CONTRACTOR

AS WITNESS:

.....

(Signature)

NAME (Print):

C1.1.3 Appointment in Terms of Section 3(1) of the Mine Health and Safety Act (Act No. 29 of 1996) as amended by the Mine Health and Safety Amendment Act (Act No. 72 of 1997)

I, in my capacity as, having been appointed, in terms of Section 4(1) of the Act (as amended), by the of the Sekhukhune District Municipality, who is the owner of the Mine(s) to be worked under the requirements of the abovementioned Acts, hereby, in terms of Section 3(1) of the Act (as amended), appoint

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

Contract number: to perform all the functions entrusted to the Employer by **Sections 2 and 3** of the Act (as amended) for all the borrow pits on Contract No: **SK8/3/1-WSIG04/2020/2021** for the **MAEBE WATER INTERVENTION PHASE 4**.

SIGNED:

DATE:

WITNESS: 1. 2.

NAME (Print): 1. 2.

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

SIGNED:

DATE:

WITNESS: 1. 2.

NAME (Print): 1. 2.

C1.1.4 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 **Sekhukhune District Municipality** (hereinafter called "the Employer") on the one part, herein represented by in his capacity as and delegate of the Employer and (hereinafter called "the Principal Contractor") of the other part, herein represented by in his capacity as

WHEREAS the Employer is desirous that certain works be constructed, viz. Contract No: **SK8/3/1-WSIG04/2020/2021 for the MAEBE WATER INTERVENTION PHASE 4**, and has accepted a tender by the Principal Contractor for the construction, completion & maintenance of such works and whereas the Employer and the Principal Contractor have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Principal Contractor with the provisions of the Occupational Health and Safety Act 1993 (Act 85 of 1993 and the Construction Regulation, July 2003);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Principal Contractor shall execute the work in accordance with the contract documents pertaining to this contract.
2. This Agreement shall hold good from its commencement date, which shall be the date of a written notice from the employer or engineer requiring him to commence the execution of the Works, to either:
 - a) the date of the final certificate issued in terms of the relevant clauses of the General Conditions of Contract (hereinafter referred to as "the GCC"), as contained in the contract documents pertaining to this contract, or
 - b) the date of termination of the contract.
3. The Principal Contractor declares himself to be conversant with the following:-
 - a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act.
 - i) Section 8: General duties of employers to their employees.
 - ii) Section 9: General duties of employers and self-employed persons to persons other than employees.
 - iii) Section 37: Acts or omissions by employees or mandatories and
 - iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.
 - v) Construction Regulations 2003, and other safety regulations, as applicable.
 - b) The procedures and safety rules of the employer as pertaining to the Principal Contractor and to all his sub-contractors.
4. The Principal Contractor is responsible for the compliance with the Act by all his sub-contractors, whether or not selected and/or approved by the employer.
5. The Principal Contractor warrants that all his and his sub-contractors' employees are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst

any such employees are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

6. The Principal Contractor undertakes to ensure that he and/or his sub-contractors and/or their respective employees will at all times comply with the following conditions:

a) The Principal Contractor shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Principal Contractor shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Principal Contractor obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.

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

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

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER:.....

WITNESS:

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

SIGNED FOR AND ON BEHALF OF THE PRINCIPAL CONTRACTOR:

WITNESS:

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

C1.2: Contract Data

This document identifies which standard conditions of contract are applicable, and together with contract specific data, establishes the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the contract

CONTRACT DATA FOR: Contract No: SK8/3/1-43/2022/23 for the MAEBE WATER INTERVENTION PHASE 4.

PART 1: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works, Third Edition, 2015, published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685, is applicable to this Contract and is obtainable from www.saice.org.za

Copies of these Conditions of Contract may be obtained from the South African Institution of Civil Engineering, Tel. 011 805 5947.

CONTRACT SPECIFIC DATA

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

Clause

- 1.1.1.13 the Defects Liability Period is 12 Months (*measured from the date of the Certificate of Completion*).
- 1.1.1.14 the time for achieving Practical Completion is 3 Months (*measured from the Commencement Date*). **Commencement date as per GCC 2015 – “Date of acceptance letter is signed”**
- 1.1.1.15 the name of the Employer is **Sekhukhune District Municipality**
- 1.1.1.16 The Engineer is **Engineerex** represented by an Employee duly authorised thereto in writing.
- 1.1.1.26 The Pricing Strategy is: **Re-measurement Contract**
- 1.2.1.2 The Employer's address for receipt of communications is:

Physical address:

Sekhukhune District Municipality
Bareki Mall Offices
Cnr. Van Riebeeck Chris Wild Street
Groblersdal
0470
Telephone: + 27 (15) 262 7300
Fax: + 27 (15) 262 3688

Postal address:

Sekhukhune District Municipality
Private Bag X8611

Clause

1.2.1.2 The Employers Agent address for receipt of communications is:

Physical address

Postal address:

Boardwalk Office Park
Block No.3
Haymeadow Crescent
Faerie Glen
Pretoria
0043

PO Box 11137
Centurion
0046

Telephone: 012 999 4900

E-mail: sharon@engineerex.co.za

3.1.3 The Employers Agent shall obtain the specific approval of the Employer before executing any of his functions or duties according to the following Clauses of the General Conditions of Contract:

Clause 5.12: Extension of Time for Practical Completion

Clause 6.3: Variations

Clause 6.6.3: Expenditure of Contingency Allowance

Clause 10.1.5: The Engineer shall rule on any claim lodged by the Contractor, but the final approval shall be upon written approval from the client in accordance with the standard documentation of processing claims.

5.3.1 The documentation required before commencement with the works execution 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 time to submit the documentation required before commencement with Works execution is ***twenty-eight (28) days***. – Commencement date of the works upon receipt of notice from the Municipality and acceptance by the contractor which will include the contractual matters.

5.4.2 The access and possession of Site shall not be exclusive to the Contractor but as set out in the Site Information.

5.8.1 The non-working days are Sundays.
The special non-working days are:

- 1 Public holidays and voting days if published prior to the tender closing date.
- 2 The year end break commencing and ending on dates as specified by SAFCEC.

5.13.1 The penalty for failing to complete the Works within the abovementioned time limit, plus approved extensions of time or condonation thereof is R 5 000.00 (Including VAT) per calendar day.

Clause

5.16.3 The latent defect period is ten (10) years for civil engineering works

6.8.2 Contract Price Adjustment: The contract shall be subject to Contract Price Adjustment.

The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule included in the General Conditions of Contract.

The value of "x" is 0.15

The values of the coefficients are:

a = 0.15 Labour

b = 0.20 Contractor's equipment

c = 0.55 Material

d = 0.10 Fuel

The province wherein the larger part of the Site is located is Limpopo.

The applicable industry for the Producer Price Index for material is Civil Engineering Total.

The base month is **October 2022**.

6.8.3 Price adjustments for variations in the cost of special materials are allowed.

6.10.1.5 The percentage advance on materials not yet built into the Permanent Work is 80%.

6.10.3 The limit of retention money is 10% of the Contract Sum.

8.6.1.1.2 The value of plant and materials supplied by the Employer to be included in the insurance sum is Nil.

8.6.1.1.3 The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is 16% of the value of the damaged work assessed and approved by the assessor at any given point in time of such incident

8.6.1.3 The limit of indemnity for liability insurance is R4, 000,000.00 for any single claim, the number of claims to be unlimited during construction and Defects Liability Period.

10.5.3 The number of Adjudication Board Members to be appointed is three (3).

10.5.4 **Payment for the labor-intensive component of the works**

Payment for the works identified in the scope of works 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 works. Any non-payment for such works shall not relieve the contractor in any way from his obligations either in contract or in delict.

Linkage of payment for labour-intensive component of works to submission of project data

The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoices shall not be paid until all pending labour information has been submitted.

Applicable Labour Laws

The current Ministerial Determination, Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice, shall apply to work as being labour-intensive and which are undertaken by unskilled or semi-skilled.

PART 2: DATA PROVIDED BY THE CONTRACTOR

Clause

1.1.1.9 The Contractor is

1.2.1.2 The Contractor's address for receipt of communications is:

Physical address:

Postal address:

.....

.....

.....

.....

.....

.....

.....

.....

Telephone:

Fax:

E-mail:

The security to be provided by the Contractor shall be:

Performance guarantee of 10% of the Contract Sum.

6.5.1.2.3 The percentage allowance to cover overhead charges is %.

VARIATIONS TO THE GENERAL CONDITIONS OF CONTRACT ARE:

Clause

Add the following to the Clause after the last sentence.

"The contract shall come into effect when the employer issues a letter to the contractor stating that his tender has been accepted / the contract has been awarded to the contractor, or upon receipt of the signed contract document by the contractor from the employer."

5.3.3 Add the following to Clause 5.3.3 after the last sentence:

"The Contractor shall not commence with the Works until they have an approved project specific health and safety plan in terms of the Occupational Health and Safety Act 1993: Construction Regulations 2003 and complied with the initial requirements thereof."

5.14.1 Practical Completion

Replace the last sentence of the second paragraph:

"Should the Engineer ... on the Due Completion Date."

with the following:

"Should the Engineer not issue such a list within 14 days, Practical Completion shall be deemed to have been achieved on the said fourteenth day."

5.14.2 Issue of Certificate of Practical Completion

Replace "the Engineer" in the second line with the following:

", the Contractor shall notify the Engineer, who shall inspect the works and the Engineer"

5.14.4 Certificate of Completion

Replace "the Engineer" in the second line of the first paragraph with:

", the Contractor shall notify the Engineer, who shall inspect the works and the Engineer"

6.10.4 Payment and Related Matters

In the third sentence replace "28" with "30".

C1.3: Form of Guarantee

PRO FORMA PERFORMANCE GUARANTEE

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

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Engineer" means:

"Works" means:

"Site" means:

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

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

Amount in words:

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

Amount in words:

"Expiry Date" means:

CONTRACT DETAILS

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

PERFORMANCE GUARANTEE

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

and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;

4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;

4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.

5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the Full outstanding balance upon receipts 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 term 1.

7. Where the Guarantor has made payment in term 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 Employer.

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 services 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 after it has expired.

13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.

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

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

C1.4: CIDB Adjudicator's Appointment

This document provides the basis by which the parties to contract may appoint an adjudicator

CIDB Adjudicator's Appointment

(For use with the GCC 2015 contract)

This agreement is made on the day of between:

..... (Name of company / organisation)

of

.....

..... (Address) and

..... (Name of company / organisation)

of

..... (Address)

(The Parties) and

..... (Name of adjudicator)

of

..... (address)
(the Adjudicator).

Disputes or differences may arise/have arisen* between the Parties under a Contract dated
and known as.

and these disputes or differences shall be/have been* referred to adjudication in accordance with the
CIDB Adjudication Procedure, (hereinafter called "the Procedure") and the Adjudicator may be or has
been requested to act.

* Delete as necessary

IT IS NOW AGREED as follows:

The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.

The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance
with the Procedure.

The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in
accordance with the Procedure as set out in the Contract Data.

The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and
shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with
the consent of the other Parties which consent shall not be unreasonably refused.

The Adjudicator shall inform the Parties if he intends to destroy the documents, which have been sent
to him in relation to the adjudication, and he shall retain documents for a further period at the request
of either Party.

SIGNED

by: ...

SIGNED

by:

SIGNED

by:

Name:

.....

who warrants that he / she is
duly authorised to sign for and
on behalf of the first Party in
the presence of

Witness

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Name:

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Address:

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Date:

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Name:

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who warrants that he / she is
duly authorised to sign for
and behalf of the second
Party in the presence of

Witness:

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Name

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Address:

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Date:

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Name:

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the Adjudicator in the presence
of

Witness:

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Name:

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Address:

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Date:

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Contract Data

1	The Adjudicator shall be paid at the hourly rate of R650.00/h in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	<p>The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to:</p> <ul style="list-style-type: none"> (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. (c) Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. (e) Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R 3000.00 This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not* currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

PART C2: PRICING DATA

SECTION CONTENTS

C2.1: Pricing Instructions C-23

C2.2: Bills of Quantities C-26

C2.1: Pricing Instructions

Provides the criteria and assumptions, which it will be assumed (in the contract) that the tenderer has taken into account when developing his prices.

This Bill of Quantities forms part of the contract documents and must be read in conjunction with all the other documents comprising the contract documents. For the purposes of this bill of quantities, the following words shall have the meanings hereby assigned to them.

Unit The unit of measurement for each item of work as defined in the standard specifications or the project specifications.

Quantity: The number of units of work for each item.

Rate: The payment per unit of work for which the tenderer tenders to do the work.

Amount: The product of the quantity and the rate tendered for an item.

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

Bill of Quantities

1 Measurement and payment shall be in accordance with the relevant provisions of Clause 8 of each of the SANS 1200 Specifications for Civil Engineering Construction referred to in the Scope of Work.

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

%	=	percent	m ² -pass	=	square metre-pass
h	=	hour	m ³	=	cubic metre
ha	=	hectare	m ³ -km	=	cubic metre-kilometre
kg	=	kilogram	MN	=	meganewton
kl	=	kilolitre	MN.m	=	meganewton-metre
km	=	kilometre	MPa	=	megapascal
km-pass	=	kilometre- pass	No.	=	number
kPa	=	kilopascal	Prov sum	=	Provisional sum
kW	=	kilowatt	PC sum	=	Prime Cost sum
l	=	litre	R/only	=	Rate only
m	=	metre	sum	=	lump sum
mm	=	millimetre	t	=	ton (1 000 kg)
m ²	=	square metre	W/day	=	Work day

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

Amount	:	The product of the quantity and the rate tendered for an item
Lump sum	:	An amount tendered for an item, the extent of which is described in the Bills of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units
Prov and		
PC sum	:	Refer to clause 6.6 of the General Conditions of Contract (2015)
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of work at which the tenderer would do the work

Unit : The unit of measurement for each item of work as defined in the Standard Specifications or the Project Specifications

3 Unless otherwise stated, items are measured net and to line and level in accordance with the specifications and drawings, and no allowance is made for waste or work done inadvertently off the lines or levels within tolerances.

The quantities set out in the Bill of Quantities are approximate quantities. The quantities of work accepted and certified for payment, will be used to determine payments to the Contractor (not the quantities given in the Bill of Quantities).

The validity of the Contract shall in no way be affected by differences between the quantities in the Schedule of Quantities and the quantities certified for payment. Work will be valued at the rates or lump sums tendered, subject only to the provisions of the General Conditions of Contract and the Standard Specifications.

4 The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.

5 It will be assumed that prices included in these Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards)

6 Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items

7 An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.

8 The quantities set out in these Bills of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.

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

10 The short headings and abbreviated descriptions of the items of payment given in these Bills of Quantities are only for the purposes of identifying the items, and shall not be used to determine the Scope of Work or provisions for payment. The actual provisions regarding the extent of the work entailed under each item and other provisions appear in the Scope of Work referring to the standard and particular specifications. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the SANS 1200 Standardised Specifications.

12 Those parts of the contract which could be constructed using labour-intensive methods were not marked in the Bills of Quantities with the letters LIC in a separate column filled in against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works,

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

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

14 The item numbers in the Schedule of Quantities refer to the corresponding item numbers in the Standard Specifications. Item numbers prefixed by the letters PS refer to payment items described under Part C5.3 of the Project Document.

15 The Tenderer shall complete the Schedule of Quantities in **black ink**.

C2.2: Bills of Quantities

Records the contractor's prices for providing works which are described elsewhere in a specification within the Scope of Work Section of the Contract

SECTION 1200 A

PAYMENT REFERS TO	ITEM NO	Description	Unit	Qty	Rate	Amount
SABS 1200 A		PRELIMINARY AND GENERAL				
8.3	1	<u>FIXED CHARGE ITEMS</u>				
8.3.1	1.1	Contractual Requirements	Sum	1		
		Establish Facilities on Site				
8.3.2.3	1.2	<u>Facilities for Engineer:</u>				
	1.2.1	a) Furnished office (No 2)	Sum	1		
	1.2.2	b) Meeting room	Sum	1		
PSAB4-2	1.2.3	c) Survey equipment	Sum	1		
PSAB4-1	1.2.4	d) Telephone (mobile phone)	Sum	1		
	1.2.5	e) Nameboards (No 2)	Sum	1		
PSAB4-3 PSAB4-4	1.2.6	f) All other specified facilities (incl Wifi internet connection and photocopier)	Sum	1		
8.3.2.3	1.3	<u>Facilities for Contractor</u>				
	1.3.1	a) Office and storage sheds	Sum	1		
	1.3.2	b) Workshops	Sum	1		
	1.3.3	c) Laboratories	Sum	1		
	1.3.4	d) Ablution and latrine facilities	Sum	1		
	1.3.5+B37: D39	e) Tool and equipment	Sum	1		
8.3.3	1.4	Other fixed-charge obligations (including making allowance for payments taking up to 60 days from date of invoice)	Sum	1		
		Total Carried Forward				

PAYMENT	No	Description	Unit	Qty	Rate	Amount
		Brought Forward				
8.3.2.2	1.5	<u>Compliance with OHS Act obligations as per Project Specifications. Compulsory Health and Safety Plan included.</u>				
	1.5.1	a) Preparation of risk assessment, safe work procedures, project OH&S file, H&S plan, medicals for all workers, provision of PPE and protective clothing, and all fixed charge OH&S matters that fulfill OHS Act of 1993 and construction regulations.	Sum	1		
	1.5.2	b) Completing and checking the project H&S file and handing over to the Client on completion of works and exit medicals for all workers	Sum	1		
	1.5.3	c) Provision of HIV/AIDS Awareness plan and all necessary fixed charge items to achieve compliance with SANS 1921 Part 6 HIV/AIDS awareness.	Sum	1		
	1.6	<u>Time-related items</u>				
8.4.1	1.6.1	Contractual Requirements	Month	3		
		Operate and maintain facilities on Site for the duration of construction				
	1.6.2	Engineers Facilities				
	1.6.2.1	a) Furnished office (No 2)	month	3		
	1.6.2.2	b) Meeting room	month	3		
PSAB4-2	1.6.2.3	c) Survey equipment	month	3		
	1.6.2.4	d) Nameboards (No 2)	month	3		
PSAB4-3	1.6.2.5	e) All other specified facilities (incl Wifi internet connection and photocopier)	month	3		
PSAB8-1	1.6.2.6	f) Airtime and data for cell phones (R1500pm pre-paid)	month	3		
PSAB8-1	1.6.2.7	f) Accommodation for the Engineer	month	3		
	1.6.3	Facilities for Contractor				
	1.6.3.1	a) Office and storage sheds	month	3		
	1.6.3.2	b) Workshops	month	3		
	1.6.3.3	c) Laboratories	month	3		
	1.6.3.4	d) Ablution and latrine facilities	month	3		
	1.6.3.5	e) Tool and equipment	month	3		
8.4.3	1.7	Supervision for duration of construction	month	3		
8.4.4	1.8	Company and Head Office overhead costs for the duration of the Contract	month	3		
8.4.5		Other time-related obligations				
	1.9	Other obligations	month	3		
8.3.2.2	1.10.	Compliance with OHS Act obligations as per Project Specifications. Safety officer and other appointments included	month	3		
		Total Carried Forward				

PAYMENT	No	Description	Unit	Qty	Rate	Amount
		Brought Forward				
PS 6.1	1.11	Security costs for duration of contract	month	3		
	1.12	Notice and warnings to consumers	month	3		
8.5		Sums Stated Provisionally by Engineer				
	1.13	Alteration to existing services by authorities	Sum	1		
	1.14	Community Liaison Officer for duration of contract	Month	3		
	1.15	Contractor's charge to allow for handling cost and profit in respect of item 1.14	10%	1		
	1.16	Provision of transport for the liaison officer	Sum	1		
8.8		Temporary works				
8.8.2	1.17	<u>Accommodation of traffic</u>	Sum	1		
8.8.3	1.17.1	Protection of structures until construction in the vicinity is complete	Sum	1		
8.8.4	1.17.2	Existing services	Sum	1		
	1.17.3	Excavate to expose existing services	Sum	1		
	1.17.4	Supply or hire of specialist equipment	Sum	1		
	1.17.5	Temporary protection of services	Sum	1		
8.8.3	1.17.6	Protection of services until construction in the vicinity is complete	Sum	1		
		Total Carried to Summary				

SECTION 1200 C

PAYMENT REFERS TO	ITEM NO	LEARNER SUBCONTRACTOR	LIC	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
SABS 1200 C	2.1			<u>SITE CLEARANCE</u>				
PSC 8.2.1	2.1.1	LEARNER SUBCONTRACTOR	LIC	Clear and grub: (a) Reservoir site	ha	0.5		
8.2.2	2.1.2	LEARNER SUBCONTRACTOR		Remove and grub large trees and tree stumps of girth: (a) Over 1,0 m and up to and including 2,0 m	No	10.0		
8.2.5	2.1.3	LEARNER SUBCONTRACTOR	LIC	Take down and reinstate existing fences	km	1.00		
8.2.6	2.1.4	LEARNER SUBCONTRACTOR		Clear hedge or fence or both where not scheduled separately	m	10		
1200 C	TOTAL SECTION 1200 C CARRIED TO SUMMARY							-

PAYMENT REFERS TO	ITEM NO	LEARNER SUBCONTRACTOR	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SABS 1200 L	2.4			WATER <u>MEDIUM PRESSURE PIPES</u> RISING MAINS				
8.2.1	2.4.1.2	LEARNER SUBCONTRACTOR		Supply, handle, lay, joint, bed, test and disinfect, galvanised steel pipes complete with flanges, gaskets, bolts, nuts, bends and all fittings - for stream crossings				
			LIC	iii) 110 mm ND g.i pipes	m	140		
	2.4.1.6			Supply and installation of a submersible pumps with corrosion resistant casings, including electrodes cables, power cables, float switches and all necessary connections. The submersible pump shall be complete with non-return valves as follows: pump shall be capable of pumping 62m ³ /hr at head 80 to 100m	No	1		
TOTAL SECTION 1200 L CARRIED TO SUMMARY								

SECTION 1200 G

PAYMENT REFERS TO	LEARNER SUBCONTRACTOR	ITEM NO	LIC	DESCRIPTION	UNIT	QUAN- TITY	RATE	AMOUNT
SABS 1200 L		4		WATER				
				PRESSED STEEL TANK				
8.2.13		4.1		Supply all materials, install, test and commission steel tank (181m ³) including all automatic float valves and switches (Abeco or similar)	No	2		
		4.2		MISCELLANEOUS ITEMS				
	LEARNER SUBCONTRACTOR	4.2.1	LIC	Supply all materials and install concrete pallsade fence 3 m including gate	m	160		
		4.2.2		Supply and install float valve complete with switches for automatic switching. Sum to include concrete works, pipe fittings to modify connecting of clean water to existing concrete storage reservoir.	Sum	1		
	LEARNER SUBCONTRACTOR	4.2.3		WC flush toilet structure for attendant complete with all materials, to discharge into wastage line	Sum	1		
SANS 1200 GA		4.3		CONCRETE (STRUCTURAL)				
				SCHEDULED FORMWORK ITEMS				
8.2.5		4.3.1	LIC	Smooth: Vertical formwork to: Floor slab at foundation level, with sides of updown beam up to 700mm high	m ²	52		
		4.3.2	LIC	Floor slab at foundation level, with sides of updown beam up to 500mm high	m ²	112		
		4.4		SCHEDULED REINFORCEMENT ITEMS				
8.3.1				High-tensile steel bars in the following:				
		4.4.1		Diameters up to 12mm	t	0.4		
		4.4.2		Mesh ref. 617	t	0.7		
		4.5		SCHEDULED CONCRETE ITEMS				
8.4.2 8.1		4.5.1	LIC	Blinding layer: Class 15 MPa/26 mm concrete of: 75 mm thickness	m ²	154		
8.1.3 & 8.4.3		4.5.2	LIC	Class 25 Mpa / 19mm concrete in: Floor slab at foundation level	m ³	36		
				Unformed surface finishes:				
				Steel-floated finishes to:				
		4.5.3	LIC	Floor slab at foundation level	m ²	154		
		4.6		Generator Room				
		4.6.1	LIC	Construct a masonry generator room, complete with a concrete floor and roof slab, including steel door as specified in the drawings. Including Generator and cabling	sum	2		
		4.7		Pump house				
		4.7.1	LIC	Construct a masonry pump house, complete with a concrete floor and roof slab, including steel door as specified in the drawings. Including pumps and fittings.	sum	1		
		4.8		Pipe Fittings Pipe connections and fittings, including valves for connection to the RO plant and the two elevated Tanks	Sum	1		
		4.9		Electrical Works				
				Telemetry System	Sum	1		
		4.1		REVERSE OSMOSIS PLANT - 50 000l/hour	Sum	1		
		4.11.1		WASTAGE LINE Supply and install Reverse Osmosis Plant wastage pipeline, handling, pipe fittings and 400mm dia uPVC wastage pipeline	Sum	1		
		4.11.2		Electrical connection and installations	Sum	1.00		
		TOTAL SECTION 1200 L CARRIED TO SUMMARY						

Item No.	DESCRIPTION	AMOUNT
1	1200 A - Preliminary and Generals	
2	Pumping Main	
3	1200 C - Site Clearance	
4	1200G - Additional Works	
5	1200L- WATER	
	SUBTOTAL 1	
	Add Contingencies, 5%	
	SUBTOTAL 2	
	VAT @ 15%	
	TOTAL FOR CONSTRUCTION	

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SEKHUKHUNE DISTRICT MUNICIPALITY

CONTRACT No: SK8/3/1-43/2022/23(WSIG) FOR MAEBE WATER SUPPLY

C3 SCOPE OF WORK

PS1: STATUS OF DOCUMENTATION:

Should there be any discrepancy between the various documentation that governs this Tender (whether issued or not), the order of precedence shall be:

The drawings issued for construction purposes,
The Schedule of Quantities,
The specific specifications, i.e. the variations to the standard specifications,
This Project Specification, and lastly
The standard specifications referred to.

C3.1 DESCRIPTION OF THE WORKS

PS 2: GENERAL DESCRIPTION OF THE CONTRACT

The work to be carried out under this contract entails the construction of new municipal infrastructure to supply potable water to the community of Maebe.

Civil

The project mainly consists of the installation of a reverse osmosis plant as follows but is not limited to:

- Installation of a 5000l/hour reverse osmosis (RO) plant.
- Construction of steel tanks for the temporary storage of water.
- Construction of generator room, complete with generator to supply the plant.
- Construction of Pumphouse complete.
- Installation of a wastate pipeline from the RO plant to specified discharge point.
- Installation of telemetry system.
- Installation of all required electrification
- Testing and commissioning of the works
- Installation of steel pipelines for the river crossing, and connecting to the already installed network.

PS 3: EMPLOYERS OBJECTIVE

The Employer's objective are to deliver public infrastructure using labour-intensive methods in accordance with EPWP Guidelines. The execution of the work will be done using the two following method:

- Established contractor to employ people from the communities where the work is to be done.

PS 4: LABOUR-INTENSIVE COMPETENCIES OF SUPERVISORY AND MANAGEMENT STAFF

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF Level 2 "National Certificate Supervision of Civil Engineering Construction Processes" and Site Agent/Manager at NQF Level 5 "Manage Labour-intensive Construction Processes" or equivalent QCTO qualifications

Specifies and describes the supplies, services, or engineering and construction works which are to be provided and any other requirements and constraints relating to the manner in which the contract work is to be performed.

PS 5: POWER SUPPLY AND OTHER SERVICES

The Contractor must make his own arrangements concerning the supply of electrical power and all other services such as potable water, sanitation and any other services deemed necessary by the contractor. No direct payment will be made for the provision of electrical and other services. The cost of providing these services will be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

PS 6: CONSTRUCTION IN CONFINED AREAS

It will be necessary for the Contractor to work in confined areas. No additional payment will be made for work in "restricted areas". In certain areas the width of the fill material and fill layers may reduce to zero and the working space may be confined. The method of construction in these confined areas depends on the Contractor's Constructional Plant. However, the Contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions, irrespective of the methods used to achieve these cross-sections and dimensions, and that the rates and amounts tendered will be deemed to include full compensation for any special equipment or construction methods or for any difficulty encountered in working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for payment be considered on account of these difficulties.

PS 7: CONTRACTOR'S CAMP SITE

The contractor shall make his own arrangements regarding the establishment of a camp site and housing for his construction personnel and all regulations stipulated by the local authority shall be adhered to.

It is anticipated that the contractor's choice of a camp site will be influenced by the availability of telephone and electrical connections as well as the supply of potable water.

PS 8: SECURITY

The Contractor shall be responsible for the security of his personnel and Constructional Plant on and around the Site of the Works and for the security of his camp, and no claims in this regard will be considered by the Employer. Provision is made in these specifications for the erection of a security fence around the site offices.

PS 9: WATER FOR CONSTRUCTION PURPOSES

The Contract will be undertaken in an arid area with scarce water resources. The Contractor must make adequate provision in his Tender for all negotiations and procurement of water for construction activities, and all related costs will be deemed to be included in his tendered rates.

PS 10: ADDITIONAL REQUIREMENTS FOR CONSTRUCTION ACTIVITIES

- (a) 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 existing roads and access to the area.
- (b) Failure to maintain road signs, warning flashing lights, etc. at the access to the site, in a 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.
- (c) 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 (SARTSM – Vol. 2, Chapter 13).

- (d) The contractor may not proceed with permanent works before the required offices, contractual matters and approved OHS file was completed including accommodation of the engineer's site personnel have been erected by him. This includes the provision of electricity, sanitary arrangements, and potable water and telephone, e-mail and fax facilities. In the event where the contractor cannot obtain telephone lines timeously from Telkom, a wireless system shall be provided for telephone, e-mail and fax facilities.

PS 11: TEMPORARY LATRINES

The Contractor shall provide sufficient latrine facilities for the use of his employees. He shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the Engineer and the Employer. Latrines shall be positioned within walking distance from wherever employees or labourers are employed on the Works.

Where required, latrines shall be provided at the rate of **ONE FOR TEN** persons and where applicable, the Contractor shall make his own arrangements and pay all charges for the removal of sewage.

PS 12: MOVING EXISTING SERVICES

The plans show the positions of services determined from observations and measurement but neither the Employer nor the Engineer accepts responsibility neither for the accuracy of the information nor for the omission of any information. The Contractor shall locate and mark the positions of hidden services in advance of construction and take all reasonable steps to protect existing works against damage, which may arise as a result of his operations on the site.

The Contractor will be held responsible for direct or consequential damage to any existing works including any claims which may arise as a result thereof and the cost of repair of any such damage shall be borne by the Contractor unless it is established by the Engineer that the Contractor exercised reasonable care and damage was unavoidable.

The owners and the Engineer shall be notified immediately of any damage done to existing works.

If so directed by the Engineer the positions of existing works shall be changed by the Contractor to meet the requirements of the proposed work. The cost of such work shall be paid for at the applicable rates set out in the Schedule of Quantities or, in the absence of such rates, at rates mutually agreed between the Engineer and the Contractor.

Work required on known services has been tabulated in a services schedule. The schedule must be read in conjunction with the services plans.

The following are the names and telephone numbers of the current contact people at the various authorities in control of services that may be affected by the roadwork's:

1. Telkom

Information to be obtained by the appointed contractor.

2. Eskom

Information to be obtained by the appointed contractor.

3. Sekhukhune District Municipality

Private Bag X 8611
Groblersdal
0470
Project Manager, Mr. Itumeleng Mokhele,
Tel: 082 421 5599

All communication by the contractor with the relevant authorities in connection with services must be directed through the Engineer.

PS 13: USE OF LOCAL RESOURCES

A major objective of this Contract is the optimum use of local resources. One of the methods to be adopted to achieve this objective is through the implementation of labour-optimising construction methods. **The target area will be the area of Maebe.**

PS 14: TRAINING

Technical skills, generic and management skills training shall be provided with the aim of providing locally employed labour with the technical skills required to undertake the work involved in the Contract, and of furthering small contractor development.

Learner Subcontractors will also be employed for the execution of all bill items indicated "Learner Subcontractor" The learner subcontractor will be empowered and mentored by the main contractor. The tendered shall include the full compensation for this. The list of learner subcontractors will be provided by the Client.

PS 15: RESTRICTIONS ON THE USE OF PERSONNEL IN THE PERMANENT EMPLOY OF THE CONTRACTOR

The Contractor shall limit the use on the Contract Works of his permanently employed personnel to that of key personnel only and shall, subject to the further provisions of the following parts of the Project Specifications

Execute and complete the Works using a temporary workforce employed directly by the Contractor and/or by Sub contractors.

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, authorise in writing that the Contractor may use in the execution of the Works, workers not being his key personnel but who are in his permanent employ. Without limiting the generality of application of this sub clause, circumstances which may be considered by the Engineer to warrant 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 Contractor has proven that he has exercised his best endeavours and taken all reasonable actions to recruit sufficient numbers of 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, of sufficient of the required knowledge and skills necessary for the execution of the Works or specific portions thereof, in cases where the time for completion allowed in the Contract is insufficient to facilitate the creation of the necessary skills through the provision of training as contemplated in this Contract
- (iii) Any other circumstances which the Engineer may deem as constituting a warrant.

PS 16: COMMUNITY LIAISON AND COMMUNITY RELATIONS

In all dealings with the various community and workers employed from within the community, the Contractor shall take due cognisance of the character, culture and circumstances of the community involved and shall at all times use his best endeavours to avoid the development of disputes and to foster a spirit of co-operation and harmony towards the Contract.

The Contractor shall at all times keep the Engineer fully informed on all matters affecting the Contract and the community, and shall attend all meetings of the Project Co-ordinating Committee as may be reasonably required by the Engineer. All matters concerning the communities shall be discussed and where possible, resolved at such meetings.

Where any resolution of the Project Co-ordinating Committee shall be contrary to the terms and provisions of the Contract, the Contractor shall not give effect to them without a prior written instruction from the Engineer. Where the Contractor is of the opinion that any instruction of the Engineer issued in terms of this clause will result in him incurring additional costs which were not provided for in his tendered rates and prices, and/or that a delay in the progress of the Works will result, he will be entitled to submit a claim in terms of Clause 10.1.1.1.

PS 17: EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR-INTENSIVE WORKS

1. Requirements for the sourcing and engagement of labour

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

The rate of pay set for the SPWP should be in line with gazetted rates and should be amended as it is announced by the Department.

- 1.2 Tasks established by the contractor must be such that:

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

- 1.3 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task.

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

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

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

- a) 55 % women;
- b) 55% youth who are between the ages of 16 and 35; and
- c) 2% on persons with disabilities.

PS 18: PROGRAMME REQUIREMENTS FOR CONSTRUCTION ACTIVITIES

The contractor shall programme his activities to be suitable in terms of his resources to complete the contract inside the stipulated time period.

PS 19: DRAWINGS ISSUED WITH THIS DOCUMENT

The following drawings are applicable to the contract and are issued with this tender document and will form part of the Contract Documents

No	Revision	Drawing Number	Drawing Title
			LIST OF DRAWING
1	A	ENG0013-07-TEN-LOD-001	LIST OF DRAWINGS
WATER			

No	Revision	Drawing Number	Drawing Title
2	A	ENG0013-07-TEN-WR-001	MAEBE BOREHOLES GENERAL LAYOUT
3	A	ENG0013-07-TEN-WR-002	MAEBE BOREHOLES WATER SCHEDULE
4	A	ENG0013-07-TEN-WR-003	MAEBE BOREHOLES PUMP STATIONS
5	A	ENG0013-07-TEN-WR-004	MAEBE BOREHOLES SCHEMATIC LAYOUT
6	A	ENG0013-07-TEN-WR-005	MAEBE BOREHOLES HORIZONTAL BENDS LAYOUT
7	A	ENG0013-07-TEN-WRLS-001	MAEBE BOREHOLES LONGITUDINAL SECTION 1
8	A	ENG0013-07-TEN-WRLS-002	MAEBE BOREHOLES LONGITUDINAL SECTION 2
9	A	ENG0013-07-TEN-WRLS-003	MAEBE BOREHOLES LONGITUDINAL SECTION 3
10	A	ENG0013-07-TEN-WRLS-004	MAEBE BOREHOLES LONGITUDINAL SECTION 4
11	A	ENG0013-07-TEN-WRLS-005	MAEBE BOREHOLES LONGITUDINAL SECTION 5
12	A	ENG0013-07-TEN-WRLS-006	MAEBE BOREHOLES LONGITUDINAL SECTION 6 & LONGITUDINAL 7
TYPICAL DETAILS			
13	A	ENG0013-07-TEN-TD-001	MAEBE BOREHOLES: BOREHOLE 3 DETAILS
14	A	ENG0013-07-TEN-TD-002	MAEBE BOREHOLES THRUST BLOCK DETAILS
15	A	ENG0013-07-TEN-TD-003	MAEBE BOREHOLES TYPICAL SCOUR DETAILS AND AIR VALVE DETAILS
16	A	ENG0013-07-TEN-TD-004	MAEBE BOREHOLES ISOLATION VALVE AND NON-RETURN VALVE DETAILS
17	A	ENG0013-07-TEN-TD-005	MAEBE BOREHOLES PRE-FABRICATED WATER TANK
18	A	ENG0013-07-TEN-TD-006	MAEBE BOREHOLES WATER TANK PLINTH REINFORCEMENT DETAILS
19	A	ENG0013-07-TEN-TD-007	MAEBE BOREHOLES WATER PIPE BEDDING DETAILS AND SLEEVED PIPE ROAD CROSSING DETAILS
20	A	ENG0013-07-TEN-TD-008	MAEBE BOREHOLES DIAGRAMATIC DETAILS HORIZONTAL NODE
21	A	ENG0013-07-TEN-TD-009	MAEBE BOREHOLES RO TREATMENT PLANT CONCRETE PLINTH
22	A	ENG0013-07-TEN-TD-010	MAEBE BOREHOLES GENERATOR HOUSE

Any information in the possession of the Contractor that is required by the Engineer's Representative to complete his as-built drawings must be supplied to the Engineer's Representative before a Certificate of Practical Completion will be issued.

Only figured dimensions must be used and Drawings must not be scaled unless required by the Engineer. The Engineer will supply any figured dimensions that may have been omitted from the Drawings.

The levels given on the Structural Drawings are subject to confirmation on the Site and the Contractor shall submit all levels to the Engineer for confirmation before he commences construction of any structure. The Contractor shall also check all clearances given on the Drawings and shall inform the Engineer of discrepancies.

PS 20: DESIGN BY ENGINEER

The Engineer on behalf of the Employer has designed the permanent works to be executed under this Contract. The Engineer's design is documented on the drawings and in the Works Specification which form part of this Procurement Document.

PS 21: DESIGN BY THE CONTRACTOR

The Contractor shall be responsible for the design of incidental temporary works such as shoring, scaffolding, formwork and traffic accommodation.

Where any alternative to the works Specifications is agreed to, the onus shall be upon the Contractor to design such alternative, to the satisfaction of the Engineer, to meet all performance and operational specifications given in the Works Specifications.

The Works shall be carried out in accordance with the following drawings, as well as any further drawings which may be issued by the Engineer:

The drawings forming part of the tender document shall be for **tender purposes only**. Three sets of full scale drawings will be issued to the successful Tenderer at the commencement of the Contract.

Only figured dimensions shall be used and drawings shall not be scaled, unless so instructed by the Engineer. The Engineer will supply any figured dimensions that may have been omitted from the drawings. All levels indicated on the drawings on existing services and road surfaces where connections are required shall be confirmed on site well in advance of the commencement of any new work. Any discrepancies shall be immediately brought to the Engineer's attention.

PS 22: "AS-BUILT" DRAWINGS

The Contractor shall record all amendments and deviations from the drawings issued for construction. This shall be done on a set of drawings specially issued for this purpose. These drawings shall be handed to the Engineer on completion (Date of Practical Completion) of the Works. The certificate will not be issued without this information having been submitted to the Engineer.

PS 23: MISCELLANEOUS

The Standard Specifications that form part of this Contract have been written to cover all ins of work normally required for Civil & Building Contracts.

The Project Specifications form an integral part of the Contract Documents, supplement the Standard Specifications, and take precedence in the event of discrepancies with the Standard Specifications, the Schedule of Quantities or the Drawings.

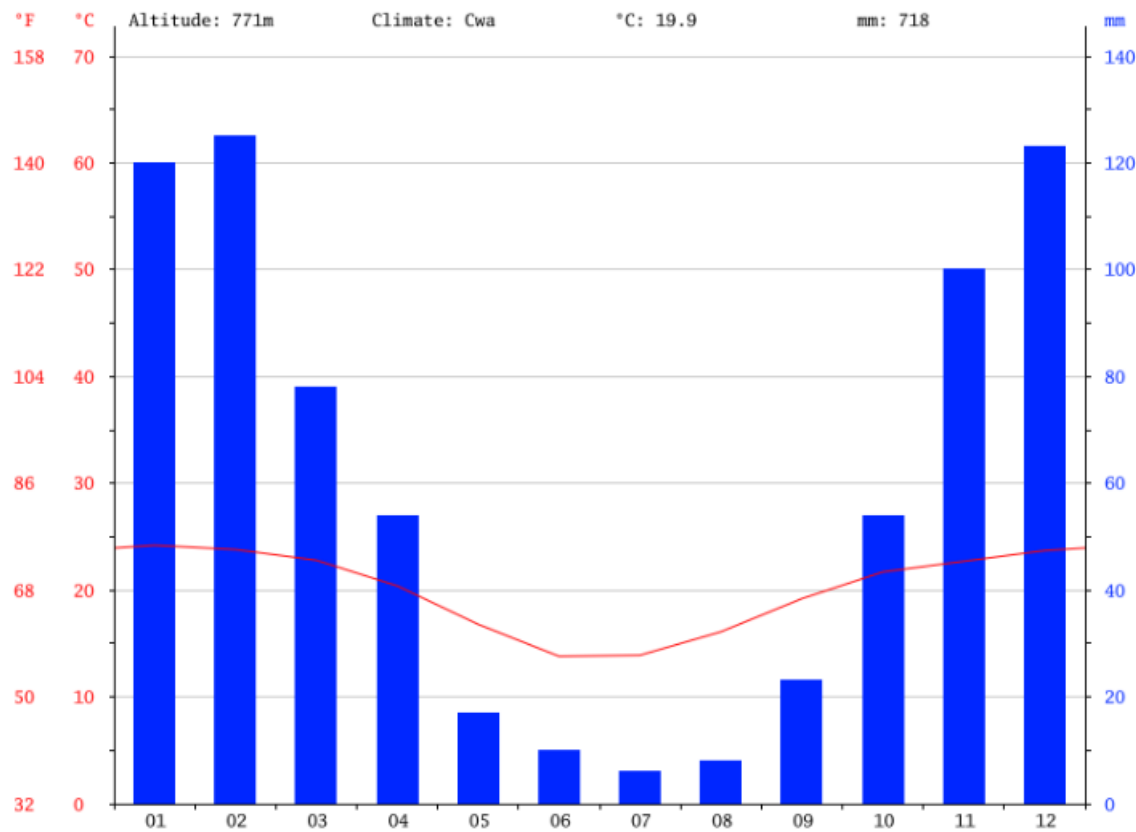
PS 24: LOCALITY

The site is located within the Maebe Village in the Limpopo Province at approximately 135.0km from Groblersdal, when travelling on the R579. The Geographical location of the project is at (GPS coordinates: 24°30'0.98"S 29°52'51.33"E).

GENERAL CLIMATIC CONDITIONS

The closest weather station is located in Steelpoort and the following graph illustrates average temperatures and precipitation per month:

CLIMATE GRAPH // WEATHER BY MONTH STEELPOORT



The driest month is July. There is 6 mm of precipitation in July. Most precipitation falls in February, with an average of 125 mm.

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	24.2	23.8	22.8	20.4	16.8	13.8	13.9	16.1	19.2	21.7	22.7	23.7
Min. Temperature (°C)	18.3	18	16.8	13.5	8.6	4.9	4.8	7.1	10.9	14.4	16.5	17.5
Max. Temperature (°C)	30.2	29.7	28.9	27.3	25	22.8	23	25.2	27.6	29	29	29.9
Avg. Temperature (°F)	75.6	74.8	73.0	68.7	62.2	56.8	57.0	61.0	66.6	71.1	72.9	74.7
Min. Temperature (°F)	64.9	64.4	62.2	56.3	47.5	40.8	40.6	44.8	51.6	57.9	61.7	63.5
Max. Temperature (°F)	86.4	85.5	84.0	81.1	77.0	73.0	73.4	77.4	81.7	84.2	84.2	85.8
Precipitation / Rainfall (mm)	120	125	78	54	17	10	6	8	23	54	100	123

The average precipitation (rainfall) days can be summarised as follows:

Month	Days		Month	Days
January	13.6		July	1.0
February	11.2		August	1.4
March	10.7		September	2.6
April	5.4		October	7.4
May	1.9		November	12.4
June	1.0		December	15.6

NATURE OF THE GROUND AND SUBSOIL CONDITIONS

The terrain is arid with the bulk of the excavation being intermediate and hard excavations. No additional payment will be made for trenches wider than 800 mm. No additional payment will be made for excavations wider than the 800 mm due to any reason whatsoever (being excavated wider or due to blasting operations).

The breaking of rock will only be done by a non-explosive rock breaking product (no traditional blasting will be permitted due to the built-up areas and condition of residential houses in the area).

PART C3.4: PROJECT SPECIFICATION MATTERS RELATING TO THE STANDARD SPECIFICATIONS

C3.4 CONSTRUCTION

C3.4.1 WORKS SPECIFICATION

Due to an ongoing internal conversion process at Standards South Africa, a single publication can be published under two different reference numbers. They refer to the same publication, e.g. SABS 1200 and SANS1200 and shall be deemed equivalent in accordance with the published stipulations from STANSA.

C 3.4.1.1 PORTION A: Applicable SABS 1200 Standardized Specifications

Although not bound in nor issued with this document, the following standardised specifications shall form part of the contract document and shall apply:

SABS 1200 A	1986	General
SABS 1200 AB	1986	Engineer's Office
SABS 1200 C	1980 (as amended 1982)	Site Clearance
SABS 1200 D	1988 (as amended 1990)	Earthworks
SABS 1200 DB	1989	Earthworks (Pipe Trenches)
SABS 1200 DK	1996	Gabions and Pitching
SABS 1200 DM	1981	Earthworks (Road, Subgrade)
SABS 1200 GA	1982	Concrete Structural Small Works
SABS 1200 L	1983	Medium Pressure Pipelines
SABS 1200 LB	1983	Bedding (Pipes)
SABS 1200 LE	1982	Stormwater drainage
SABS 1200 LG	1983	Pipe Jacking
SABS 1200 M	1996	Roads (General)
SABS 1200 ME	1981	Sub Base
SABS 1200 MF	1981	Base

C 3.4.1.2 PORTION B: Variations and additions to the Standard Specifications

PSA	SABS 1200 A:	GENERAL
PSAB	SANS 1200 AB:	ENGINEER'S OFFICE
PSC	SANS 1200 C:	SITE CLEARANCE
PSD	SANS 1200 D:	EARTHWORKS
PSDB	SANS 1200 DB :	EARTHWORKS (PIPE TRENCHES)
PSGA	SANS 1200 GA:	CONCRETE (Small works)
PSL	SABS 1200 L:	MEDIUM PRESSURE PIPES
PSLB	SABS 1200 LB:	BEDDING
PSLD	SABS 1200 LD:	SEWER
PSLE	SABS 1200 LE:	STORMWATER
PSLG	SANS 1200 LG:	PIPE JACKING
PSDK	SANS 1200 DK :	GABIONS AND PITCHING
PSDM	SANS 1200 DM:	EARTHWORKS (ROADS, SUBGRADE)
PF:		GENERAL MATERIAL AND CONSTRUCT

ION SPECIFICATION

PSA SABS 1200 A: GENERAL

CONTENTS

PSA2 INTERPRETATIONS

PSA3 MATERIALS

PSA4 PLANT

PSA5 CONSTRUCTION

PSA7 TESTING

PSA8 MEASUREMENT AND PAYMENT

PSA2 INTERPRETATIONS

PSA2-1 Applicable edition of standards. (Sub clause 2.2)

Add at the beginning of Sub clause 2.2:

"Unless a specific edition is specified (see the List of Applicable Specifications)"

PSA2-2 Definitions (Sub clause 2.3)

Add:

Sekhukhune District Municipality Roads: Roads are defined by a network of public and non-public roads within the local authority boundary providing access to the site. Any reference to roads, parking and paved areas for traffic shall be interchangeable.

Party, Parties and Third Party: 'Party' and 'Parties' means the Client and the Consultant and 'Third Party' means any other person or entity as the contract requires.

PSA2-3 Abbreviations. (Sub clause 2.4)

Add to Sub clause 2.4(b):

"MAMDD: Modified AASHTO maximum dry density".

PSA2-4 Items in Schedule of Quantities. (Sub clause 2.8.1)

In the fourth line of Sub clause 2.8.1, after the word "specification", add:

"and or in the measurement and payment clause of the particular specification or project specification".

PSA3 MATERIALS

PSA3-1 Quality. (Sub clause 3.1)

Add the following paragraph:

Where a material to be used in this Contract is specified to comply with the requirements of a SANS Standard Specification, and such material is available with the official SANS mark, the material used shall bear the official mark.

PSA4 PLANT

PSA4-1 Contractor's offices, stores and services (Sub clause 4.2)

Add the following sub paragraphs:

Medical facilities and safety equipment

The suitable first aid services required in terms of Sub clause 4.2 of SANS 1200 A shall include, inter alia, a First Aid cabinet fully equipped and maintained with at least the minimum contents as listed in Regulation 3 of the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), to deal with accidents and ailments which are likely to occur during the construction period. The Contractor shall provide personal safety equipment and facilities as required by Regulation 2 of the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

Restrictions on employee accommodation

No housing is available for the Contractor's employees. The Contractor shall make his own arrangements to house his employees.

The Employer shall place an area at the disposal of the Contractor to enable him to erect his site offices, workshops and stores. Any temporary housing, services connections and facilities shall comply with the requirements of the local authority. The Contractor shall provide his own fencing and site security.

Latrine facilities.

The suitable sanitary services shall be of the flushing type connected to the sewer network (where possible) and shall be readily accessible to workers at all areas of the site. In remote areas where and existing sewer network is not available, chemical toilets shall be provided.

PSA5 CONSTRUCTION

PSA5-1 Survey (Sub clause 5.1)

Add the following paragraph:

Tender drawings shall not be used for construction purposes. Construction drawings and additional detailed information will be made available to the Contractor as and when required.

PSA5-2 Setting out of the Works. (Sub clause 5.1.1)

Add the following paragraphs:

The Contractor shall contract or employ a professional land surveyor and supporting team who will check the reference beacons. Agreement shall be reached with the Engineer on the values of the beacons to be used. It is the Contractor's responsibility to maintain and protect all reference beacons. The Contractor shall make available, for the duration of the contract period, when required by the Engineer, one skilled and one unskilled survey labourer.

The contract will construct a limited number of official reference and level beacons on the site of the works. The Contractor shall place additional reference beacons on all sides of the work areas for accurate setting out and levelling purposes. These beacons shall be placed in concrete, marked and certified by a professional land surveyor. Beacons shall be check-levelled during construction to confirm the accuracy when instructed by the Engineer.

Prior to the commencement of construction, the Contractor shall measure the existing levels on the area of the works. All survey work to be carried out by a professional land surveyor. All earthworks quantities shall be certified correct by a professional land surveyor. All as built levels and dimensions shall be certified correct by a registered land surveyor.

The Contractor shall advise the Engineer of any conflict between the position of any part of the Works and an existing feature.

PSA5-3 Survey beacons. (Sub clause 5.1.2)

Add the following paragraph:

The Contractor shall search for, locate, protect and record all the beacons before any work commences.

The contractor shall ensure that the corner pegs of each stand are located and protected. If pegs are removed during the construction activities it shall be replaced by a professional land surveyor at the cost of the contractor.

PSA5-4 Watching, barricading, lighting and traffic crossings (Sub clause 5.2)

The Contractor shall carry out and maintain such temporary works and provide all temporary road signs, temporary bridging, pipes, deviations and the like, as are necessary to maintain and safeguard the normal flow of public and private, vehicular and pedestrian traffic within the confines of the Site of the Works.

PSA5-5 Protection of overhead and underground services (Sub clause 5.4)

Add the following paragraph

Action by Contractor

Various services are known to exist in the area of development. Their approximate positions are shown on the drawings but, although they are based on the best information available, their accuracy cannot be guaranteed. It is likely that other services that are not shown on the drawings do exist.

All services, in particular cables, shall be treated as live until proven otherwise.

Before the commencement of any excavation the Contractor shall confirm the name and telephone number of the relevant officials directly concerned with the known or possible unknown services, shall acquaint himself with the position of the control points of the services and shall have readily available the equipment necessary to shut-off and isolate any such service. The Contractor shall liaise with the relevant authorities or controlling bodies for the necessary temporary closure of any services during construction.

The Contractor shall take into consideration and programme all exposure of existing services within the works programme submitted to the Engineer. The Contractor shall ensure that critical services, such as fibre optic, telecommunications and HD electrical lines are not exposed indefinitely and shall relocate the services as instructed by the Engineer. Any damage resulting from unnecessary exposure shall be repaired by the Contractor at no additional cost.

Before any work that involves services is carried out, the Contractor shall notify the Engineer and the Engineer's Representative at least 3 working days in advance of any temporary disconnection, the nature, time and duration. The Engineer may request method statements related to the exposure, excavation and relocation of certain key services, which shall be submitted by the Contractor upon request.

PSA5-6 Dealing with water (Sub-clause 5.5)

In addition to the items as set out in Sub-clause 5.5 the contractor shall also provide pumping equipment, pipes and other equipment as may be necessary to keep excavations dry at all times.

PSA7 TESTING

Add the following paragraphs:

Before any construction work may commence the Contractor shall submit a quality control plan approved by the Engineer. As a minimum all the tests and measurements as specified in the standard and project specifications shall be included in the quality control plan. All sampling and testing shall be carried out by a SANAS (South African National Accreditation System) accredited laboratory.

A provisional amount is allowed for any tests and checks that the Engineer may decide to carry out as he deems necessary.

Test results shall be submitted to the Engineer complete with an analysis indicating compliance or the lack thereof with the specification all as per SANS 1200 A Clause 7. No material shall form part of the works, or be measured for payment unless such test results are submitted and approved by the Engineer.

Where discrepancies exist between the test results of the Engineer and the test results of the Contractor, the results of the Engineer shall be deemed to be correct.

PSA8 MEASUREMENT AND PAYMENT

PSA8-1 Method of measurement, all sections. (Sub clause 8.1.1.)

In the second line of Sub clause 8.1.1, after the words "standardized specification or in" add:

"the measurement and payment clause of the standard specification, particular specification or".

PSA8-2 Preliminary and General Items (Sub clause 8.1.2)

Add the following paragraph:

Should the combined total tendered for Items under payment item SABS 1200A, Payment Clause 8.3: Scheduled fixed-charge and value-rated items exceed 15 % of the tender sum (excluding CPA, contingencies and VAT), the tenderer shall state his reasons in writing for tendering in this manner.

PSA8-3 Fixed cost and value related items (Sub-clause 8.2.1)

Replace this sub-clause with the following:

Fixed costs in respect of item 8.3.1 will be paid as follows:

Eighty per cent (80%) of the tendered amount will be paid as soon as the facilities have been established and have been approved. The residual twenty per cent (20%) will be paid as soon as the work is completed, the facilities have been removed and the campsite has been vacated and cleaned.

The amount that is tendered in terms of item 8.3.2 will be paid as follows:

Eighty per cent (80%) of the tendered amount will be paid as soon as the facilities have been established and have been approved. The residual twenty per cent (20%) will be paid as soon as the work is completed, the facilities have been removed and the campsite has been vacated and cleaned.

PSA8-4 Time-related items. (Sub clause 8.2.2)

Replace this sub-clause with the following:

"Subject to the provisions of 8.2.3 and 8.2.4, payment of item 8.4.1 (time-related item) will take place in equal monthly amounts, calculated on the tendered amount for the item, divided by the contract period in months, with the understanding that the total of the monthly payments which was paid for this specific item does not exceed the proportion that the progress of the works certified for payment to date bears in relation to the cost of the works as a whole.

Should the Employer grant an extension of time, the Contractor is entitled to an increase in the amount tendered for time related items, and this increase must be kept in the same proportion to the original tender amount as the extension of time is to the original time period of the completion of the works.

Payment for such increased amounts will be considered as full compensation for all time related, Provisional and General costs which arise as a result of the extension of time.

PSA8-5 Sums stated provisionally by Engineer (Sub clause 8.5)

Amend the penultimate sentence of Sub clause 8.5 to read:

"The percentage rate for (b) (2) above shall cover the Contractor's overheads, charges and profit on the work covered by the sums provisionally stated for (b) (1) above. Payment will be made on the basis of the sums actually paid for such work, exclusive of VAT."

PSA8-6 Prime cost items. (Sub clause 8.6)

Amend the penultimate sentence of Sub clause 8.6 to read:

"The percentage rate for (b) shall cover the Contractor's overheads, charges for taking delivery and profit on the supply of materials or goods covered by the sums stated in (a) above. Payment will be made on the basis of the sums actually paid for such materials or goods, exclusive of VAT."

PSA8-7 Day work (Sub clause 8.7)

Provisional items for Day work are scheduled as follows:

- i. Labour at hourly rates for skilled, semi-skilled and unskilled labourers.
- ii. The Contractor's own plant at hourly rates for various types.

Tendered unit rates or unit rates that are agreed in terms of Sub clause 37.2 of the General Conditions of Contract for the Contractor's own plant used for Day work shall cover the full cost of the use of such plant and shall therefore, in addition to the items listed in Sub clause 8.7, cover the cost of plant operators, consumable stores, fuel and maintenance.

PSA8-9 Dealing with traffic (Sub clause 8.8.2)

Dealing with traffic, the maintenance of access, protection at level crossings and other requirements of Project Specification PS14 and PS15 as well as SABS 1200A sub-clause 5.2.

PSA8-10 Dealing with existing services (Sub clause 8.8.4)

The following works that are to be executed by the Contractor on the instruction of the Engineer will be measured and paid under, "Day work"

- i. Careful excavation carried out by the Contractor on the instruction of the Engineer to locate and expose existing services of which the exact location is not known, or where the existing service is found to be further than 2, 0 m from the position indicated. The rate shall cover all costs of materials, labour and plant, including specialist detecting equipment required to locate and expose the service.
- ii. Work that is carried out by the Contractor with regard to existing services that are not indicated on the drawings.

Other than payment of the cost of alterations to overhead services and for dealing with and protecting lamp posts/mast and associated foundations affected by the excavations, dealing with and working below overhead wires will not be measured separately for payment as the costs thereof will be held to be covered by the other scheduled items.

PSA8-11 Alterations to existing services (Sub clause 8.8.4)

Permanent alterations made to existing services by the Contractor will be measured and paid under the relevant Scheduled or Day-Works items. The length of a service that is re-laid will be measured in its final position.

PSA8-12 Dealing with water / stormwater (Sub clause 8.8.6)

The following shall be deemed inclusive of the tendered rates:

- a) Dewatering of excavations/non-free-draining areas shall be undertaken through pumping.
- b) Pumping shall commence at the onset of rainfall or water draining onto the site of works and a build-up of water within excavations/non-free-draining areas and will continue until all free standing water has been removed from the excavations/non-free-draining areas.

- c) Irrespective of the duration of rainfall or water draining onto the site of works, all areas exhibiting ponding of water shall be drained within 6 hours after the termination of rainfall or water draining onto the site of works.
- d) The onus rests on the Contractor to ensure quick response.

The cost of supplying and operating the equipment for dewatering of excavations and controlling of stormwater will be at the cost of the contractor.

Any consequential damage of any works due to water damage shall be borne by the Contractor.

PSA8-13 Free haul and overhaul

Notwithstanding any clauses in any Standardized Specification or Standard Specification Section dealing with the definition, measurement and/or payment for transport, free haul and/or overhaul, no measurement or payment for overhaul will be made. All haulage will be considered to be free haul and the cost thereof will be deemed to be covered by the rates for the provision or disposal of the applicable material.

PSA8-14 Miscellaneous items

An item which, in the payment clause column of the Schedule of Quantities, does not refer to a specific payment item will be measured in the unit as scheduled in the Bills of Quantity.

The sum or rate for such item shall cover the cost of all materials, labour, plant as well as profit required to execute and complete the work as specified, described in the Schedule of Quantities or shown on the drawing(s).

PSAB SANS 1200 AB: ENGINEER'S OFFICE

CONTENTS

PSAB3	MATERIALS
PSAB4	PLANT
PSAB5	CONSTRUCTION
PSAB8	MEASUREMENT AND PAYMENT

PSAB3 MATERIALS

PSAB3-1 Name board. (Sub clause 3.1)

Two name boards, manufactured as specified in Sub clause 3.1 and as shown on the tender drawings, shall be provided, and shall be erected, plumb and level, in the position as directed by the Engineer.

The wording for the name boards shall be as ordered at the commencement of the Works.

PSAB3-2 Engineer's office. (Sub clause 3.2)

The Contractor shall provide two offices of 24m², of which one will be used as storage for samples. The erection position will be indicated by the Engineer.

All windows in the office shall be fitted with burglar proofing over the entire glazed area, and with fly screens over the openings.

The Contractor shall maintain and service, as applicable, the facilities specified in SANS 1200 A and PSAB.

The facility shall include:

- a) furnished site offices (1);
- b) unfurnished site offices (1);
- c) ablution facilities;
- d) shaded parking facilities (2);
- e) photocopy machine (See PSAB4-3);
- f) telephone, fax, internet and cell phone (See PSAB4-1);
- g) survey equipment (See PSAB4-2);
- h) a site instruction book (See PSAB 5-3);
- i) protective clothing for 8 persons (excluding appropriate footwear);
- j) safety equipment (including rotating amber constructions lights; and
- k) emergency medical kit.
- l) Electronic equipment for the Engineer (See PSAB4-4);

Unless specified otherwise, on completion of the Works, these facilities shall revert to the Contractor who shall remove them from the site. The term “use of the Engineer” will be deemed to include, as appropriate, use by the Engineer’s staff and the Engineer’s Representative and his staff.

Latrine and ablution facility for the engineer: The Contractor shall provide, maintain and service one ablution room for ladies and one ablution room for gents for the exclusive use of the Engineer. This room shall be constructed as specified for the Engineer's office, but shall be at least 4 m² in size and fitted with one flush toilet and one hand washbasin.

Insurance: The Contractor shall be responsible for insuring all equipment in the engineer’s site office against theft and accidental loss for the contract period.

PSAB4 PLANT

PSAB4-1 Cellular phone. (Sub clause 4.1)

The Contractor shall provide one cellular telephone, suitable and approved, including a carry case, spare battery and car power supply kit for the duration of construction for official use by the Engineer.

The Contractor shall provide internet connectivity in the engineer’s office for the duration of construction for official use by the Engineer.

The Contractor shall settle the accounts for all costs of installation, rental and official telephone calls, emails and faxes during the construction period. He shall also be responsible for insuring the cellular telephones against theft or accidental loss.

PSAB4-2 Survey equipment

The Contractor shall provide the following survey equipment for use exclusively by the Engineer:

- i. 1 x tachometer capable of reading to 20 seconds of arc with tripod,
- ii. 1 x Engineer’s automatic level with tripod,
- iii. 2 x tachometer staffs with staff bubbles,
- iv. 1 x level staff with staff bubble,
- v. 4 x ranging rods,
- vi. 1 x Measuring wheel,
- vii. 1 x pocket tape of length 10 m,
- viii. 1 x 6 V, 8-cell torch with spare batteries,
- ix. All steel and wood pegs, concrete, hammers, picks, shovel, etc, that the Engineer may require,

The Contractor shall provide proof, at the start of the Contract, that the tachometer and level have recently been serviced by an acceptable institution and shall, throughout the Contract, service and maintain all survey equipment and he shall insure same and indemnify the Employer and the Engineer against all claims for loss, breakage or theft of such equipment.

The tachometer and tachometer staffs may be shared by arrangement between the Contractor and the Engineer, but the other instruments shall be provided for the exclusive use of the Engineer.

On completion of the Works, the equipment will be returned to the Contractor who shall remove it from the site.

PSAB4-3 Photocopying machine

The Contractor shall provide, maintain and service one A3 size photocopying machine in the Engineer's office together with an adequate supply of paper of A3 and A4 sizes.

PSAB4-4 Electronic equipment for the Engineer

The Contractor will provide one (1x) laptop and with a standard Office Suite of software for the exclusive use by the Engineer and his site staff, to assist in the administration of the Contract, for the duration of construction. The contractor will be responsible for the supply of all consumable items related to the equipment above.

PSAB5 CONSTRUCTION

PSAB5-1 Name board. (Sub clause 5.1)

The name boards shall be removed by the Contractor before the issue of the Certificate of Completion.

PSAB5-2 Survey assistants. (Sub clause 5.5)

In terms of Sub clause 5.5 two suitably trained and experienced workmen to be used as survey assistants shall be made available to the Engineer during working hours as and when required. As far as practical the same assistants, who shall be able to speak English, shall be allocated to the Engineer for the full duration of construction.

PSAB5-3 Site instruction book

Throughout the construction period the Contractor shall supply a carbon triplicate book as a site instruction book.

This book shall be kept on Site and shall be accessible to both the Contractor and the Engineer at all times. It shall be used:

- i. By the Contractor for providing the Engineer with any information regarding the construction of the Works which may be requested, and giving notification in writing of inspections, drawings, etc, required by the Contractor, and
- ii. By the Engineer for the purpose of writing day-to-day instructions and confirming any verbal information or instructions given to the Contractor.

One copy of each site note issued shall remain in the book.

PSAB8 MEASUREMENT AND PAYMENT

PSAB8-1 Cellular phone Unit: Prov Sum

Notwithstanding the requirements of Sub clause 5.4, the Contractor shall be responsible for the costs of all official calls made by the Engineer to a maximum amount of R1 500.00 per month for the full construction period, as well as the costs of the rental if any.

PSAB8-2 Photocopying machineUnit: Sum

The Contractor shall be responsible for the costs of supplying and all maintenance and servicing of the photocopying machine.

The rate shall cover the supply, maintenance and servicing for the full duration of the construction period.

PSC SANS 1200 C: SITE CLEARANCE

CONTENTS

PSC3 MATERIALS

PSC5 CONSTRUCTION

PSC8 MEASUREMENT AND PAYMENT

PSC3 MATERIALS

PSC311 Disposal of material (Sub-clause 3.1)

An existing dumpsite for spoil of material (soil, rock, masonry, etc as approved by the engineer, - not organic or decomposable material) is not available. All materials from excavations or demolishing shall be carted to commercial off-site dumpsites.

PSC5 CONSTRUCTION

PSC5-1 Areas to be cleared and grubbed. (Sub clause 5.1)

Only the approved minimum area required for the execution of the Works including areas on which material shall be stockpiled for later re-use or on which material shall be dumped and spread, shall be cleared and grubbed. The areas where work is to be carried out must be kept clean for the duration of the contract. All rubbish must be removed without delay and the site must be left clean and tidy on completion of the service.

PSC5-2 Conservation of topsoil. (Sub clause 5.6)

Topsoil up to a depth of 150 mm, if available, shall be removed from the above specified cleared areas and stockpiled on approved sites for later reuse. Until required for spreading, the stockpiles of topsoil material shall be stabilised by watering or other approved means.

When in the opinion of the Engineer, there is an insufficient quantity of topsoil available from the areas to be cleared, the Contractor shall import topsoil from borrow areas designated by the Engineer.

PSC5-3 Demolition of structures (Sub clause 5.8)

Where shown on the drawings or ordered, manholes, catch pits, chambers and pipe outlets shall be demolished. All metal fittings shall be salvaged and delivered to the Employer's yard. All other rubble shall be disposed of to the approval of the Engineer. The resulting void shall be backfilled with material of a G7 quality, and compacted to a density, greater than that of the adjacent material, but not less than 93% Mod AASHTO.

Any demolition or removal activity that includes asbestos and asbestos containing waste products shall be dealt with as call for in terms of Section 20 of the Environmental Conservation Act, 1989 (Act 73 of 1989) and the Asbestos Regulation 2001(R155 dated 10 February 2002) in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993). All costs for the removal and disposal of asbestos and asbestos containing waste shall be deemed as inclusive of the rate for the demolition or removal of such items.

PSC8 MEASUREMENT AND PAYMENT

PSC8-1 Clear and grub. (Sub clause 8.2.1)

Site clearance for pipe trenches will not be measured where such trenches lie within the carriageway of any road.

The rate tendered for clearing and grubbing shall cover the cost of disposal of the material by approved means at places approved by the Engineer.

PSC8-2 Removal of pipes. (Sub clause 8.2.7)

In addition to the requirements of Sub clause 8.2.7, the rate shall cover the cost of locating the pipeline and any additional costs of excavation and backfilling not covered by other normal rates for excavation and backfilling under SANS 1200 DB.

PSC8-3 Demolish and remove structures / buildings (Sub clause 8.2.8)

In addition to the requirements of Sub clause 8.2.8 the rate shall cover the cost of excavation and demolition of the scheduled unit complete with inclusion of sub-surface foundations, concrete slabs and any engineering service associated with the structure or building within 1 m of the foundations of such structure or building. The supply of material for and backfilling of the voids so formed, including compaction, shall be measured as a separate earthworks item.

PSC8-3.1 Add: Removing existing concrete in rehabilitation work (Sub clause 8.2.8.1)

The unit of measurement shall be a cubic metre of concrete broken up and removed to an approved spoil dump site or approved stockpiles as specified. The quantity shall be determined in accordance with the authorized horizontal dimensions and the average thickness of the part removed. Alternatively measured as the horizontal dimension in m^2 for thicknesses in mm as specified in the bills of quantity.

The tender rate shall include full compensation for the breaking up of the concrete, loading, transporting and placing it in approved spoil dumps or commercial sites or stockpiles. The tendered rate shall include full compensation for the protection of adjacent concrete and its repair should it be damaged.

Dowels and tie bars in existing concrete and stays used to keep the bars in position will not be regarded as reinforcing.

For reinforced concrete the rate will also deem to include for separating the steel from the concrete to allow for loading and transport.

- a) Reinforced concrete.....Unit: m^3
- b) Reinforced concrete (depth as specified in mm).....Unit: m^2
- c) Concrete without reinforce.....Unit: m^3
- d) Concrete without reinforcement (depth as specified mm)
.....Unit: m^2

PSC8-4 Removal and conservation of topsoil. (Sub clause 8.2.10)

The rate tendered for the removal of in situ topsoil shall, in addition to the items listed in Sub clause 8.2.10, also cover the cost of preparing the stockpile area, loading and unloading, and stabilizing and protecting the stockpiles of topsoil.

PSGA SANS 1200 GA: CONCRETE (Small works)

Note: See also SANS1200G (and related PSG clauses)

CONTENTS

PSGA3	MATERIAL
PSGA4	PLANT
PSGA3	MATERIAL

PSGA3-1 Cement (Sub clause 3.2)

The cement used in the works shall comply with SANS 50197-1:2000 (SABS EN 197-1) for common cements.

- i. CEM I 32,5
- ii. CEM II/A-S 32,5
- iii. CEM II/B-V 32,5
- iv. CEM II/B-W 32,5

Test certificates from an approved laboratory shall be furnished by the Contractor indicating the alkalinity of the cement expressed as the percentage sodium oxide equivalent [$\text{Na}_2\text{O} + 0,658 (\% \text{K}_2\text{O})$]. Cements with alkalinity content in excess of 0,60% by mass of the cement shall not be used regardless of whether or not the aggregates are considered to be potentially alkali reactive.

The source of supply for each type of cementitious material shall not be changed during the contract period.

PSGA3-2 Storage of cement (Sub clause 3.2.2)

Consignments of cement shall be stored in such a way that they are used in the same sequence as they are delivered on the site. Any cement that shows any degree of hydration and setting or which has been stored on the site for a period exceeding twelve weeks from the date of despatch by the manufacture shall be removed from the site of the works and replaced at the Contractor's own expenses.

PSGA3-3 Water (sub clause 3.3)

Ensure that water is clean and free from detrimental amounts of acid, alkalis, organic matter, and other substances that could impair the strength or durability of concrete.

Should the suitability of water be in doubt, particularly in remote areas, water must be tested for approval. In these tests, the 28 day strength of mortar cubes made with Portland cement and the water in question should be compared with that of similar cubes made with the same cement, sand and water of known purity. The water may be considered suitable for use in the average 28 day strength of three mortar cubes made with the suspect water at least 90% of that of three similar cubes made with the water of known purity.

Admixtures

Admixtures shall not be used in any concrete mix without the approval of the Engineer who may require tests to be made before they are used. To facilitate the approval, the Contractor shall provide the following information:

- i. the trade name of the admixture, its source, and the manufacturer's recommended method of use,
- ii. typical dosage rates and possible detrimental effects of under-and –over-dosage,
- iii. whether compound (such as those containing chloride in any form as an active ingredient) likely to cause corrosion of the reinforcement or deterioration of the concrete are present and, if so the chloride content (express as chloride ions or as equivalent anhydrous calcium chloride) by mass or expressed as equivalent anhydrous calcium chloride by mass admixture,
- iv. the average expected air content of freshly mixed concrete containing an admixture which caused air to be entrained when used at the manufacturer's recommended rate of dosage,

If the use of an air-entraining agent is permitted by the Engineer, test measurements shall be carried out on site by the Contractor, as and when required by the Engineer, to determine:

- i. the percentage of air in the concrete and
- ii. the density of the concrete

The Contractor shall provide equipment to permit measurement of entrained air at such frequencies as are required by the Engineer

Air-entraining agent shall comply with ASTM C620, or BS 5075 Part 2

PSGA3-4 Aggregates (sub clause 3.4)

Aggregates shall comply with SABS 1083.

Additional requirements for aggregates are as follows:

- a. The shrinkage of both fine and coarse aggregate shall each not exceed 130% of that of the reference aggregate referred to in the SABS standard.
- b. Coarse aggregate shall comply with the "10% FACT" values specified for stone which will be used in concrete subject to abrasion.
- c. The nominal maximum size of coarse aggregate shall be limited to 37.5mm and shall also not exceed 25% of the thickness of the pavement.

If the maximum coarse aggregate size exceeds 26.5mm, a second coarse aggregate of smaller maximum size shall be incorporated in the concrete mix.

- d. The water demand of the fine aggregate (i.e. the amount of water required to produce a slump of 75mm) in concrete containing an optimum amount of nominal 19mm single –sized stone as defined by SABS 1083 shall not exceed 220 litres per m³.
- e. The siliceous particle content of the fine aggregate as measured by the acid solubility test shall exceed 40%.

- f. During progress of the work no fine aggregate shall be used if its fineness modules varies by more than 0.20 either way from that of the approved fine aggregate unless the mix proportions are adjusted appropriately by the laboratory.

PSGA3-5 Reinforcement (sub clause 3.5)

Reinforcing bars shall comply with the relevant requirements of SABS 920. Welded steel fabric shall comply with the relevant requirements of SABS 1024. Steel shall be stacked off the ground as to prevent distortion and shall be protected from aggressive environments and contamination.

PSGA3-8 Storage of materials (sub clause 3.6)

All materials shall be stored on the site in such a manner as to prevent deterioration or contamination by foreign matter. Any material which has deteriorated or which has been contaminated or otherwise damaged shall not be used for concrete.

PSGA4 PLANT

PSGA4-4 Formwork (Sub clause 4.4)

PSGA4-4.1 Finish (Sub clause 4.4.2)

All off – shutter concrete shall be smooth. All surfaces not shuttered shall be wood – floated and finished with a “burlap drag” texture.

PSGA4-4.2 Ties (Sub clause 4.4.3)

Add the following paragraphs: No plugs, bolts, ties or clamps of any description used to hold the formwork will be allowed to project into or through the concrete unless expressly approved by the Engineer.

Formwork ties in water retaining structures shall be of the 12mm Extended Coil Tie with Water-Bar type. No ferruled or ferrule pipes may be used in structural elements of water-retaining structures. The Contractor shall allow in his rates for the specified formwork ties and ensure that his formwork is compatible with these ties.

After removal of plastic spacing cones of the extended coil ties from concrete, the openings in the concrete shall be roughened with a mechanical wire brush. Thereafter the openings shall be painted with cement mortar and filled with a non – shrink grout (non-toxic) product compatible with the chemicals used in the water. The grout filling shall be applied in such a way as to protect the ties against corrosion.

Only approved tie-rods consisting of solid rods (that remain embedded in the concrete) and with removable ends shall be used to hold the formwork of the walls. The removable tie-rod ends shall facilitate removal without damage to the concrete, and no permanently embedded parts of such tie-rods shall have less than 50 mm of cover to the finished concrete surface.

The cavities left in the concrete when the tie-rod end cones are removed shall be soundly caulked with a cement mortar to which an approved shrinkage-reducing agent has been added. All caulked cavities shall be watertight and shall be neatly finished to a smooth surface uniform with that of the surrounding concrete.

The cost of supplying special tie-rods as well as the filling of cavities left by the tie-rod cones shall be included in the rates tendered for formwork under the appropriate pay items.

On no account shall formwork be secured to reinforcing bars.

PSGA5 CONSTRUCTION

PSGA5-1 Reinforcement

PSGA5-1.1 Bending (sub clause 5.1.1)

No flame cutting of bars will be permitted except with the written approval of the Engineer. No hot – bending of bars will be permitted. Bars already bent may not be straightened and reused.

PSGA5-1.2 Fixing (sub clause 5.1.2)

Welding of steel reinforcement will not be allowed.

PSGA5-1.3 Cover (sub clause 5.1.3)

Reinforcement shall be supported during placing of the concrete in such a manner as to ensure that it is embedded approximately 40mm in the concrete below the finished surface of the concrete.

No reinforcement shall be continuous across any joint between panels or across any isolation joint unless so specified on the drawings.

PSGA 5-2 Formwork (Clause 5.2)

PSGA5-2.1 Classification of finishes (Sub clause 5.2.1)

Special off-shutter finish

Special off-shutter formwork shall produce a smooth finish that will comply with the requirements of Degree of Accuracy I according to SABS 1200 G Clause 6.2. For this contract the special off-shutter finish is applicable to all visible concrete.

Formwork for all classes of finish shall be made of steel panels. Small approved laminated wooden board inserts to steel frame panes may only be used in confined places and the use thereof will be subject to approval by the Engineer. The panels shall be free from rust, ridges, fins, bulges, imperfections, irregularities, chips and holes. The concrete surface shall be smooth and free from irregularities, bulges, ridges, imperfections, air bubbles, honeycomb or surface discolouration. Grout checks shall be used at all construction joints and chamfers at all corners.

Joints between panels shall be sealed tightly to prevent local honeycombing or leaching of concrete. Joints between panes shall form straight horizontal and vertical lines which shall be spaced evenly on the formed concrete surface, and shall be even and smooth and require minimal or no finishing. The layout of all formwork panels and construction joints shall be discussed with the Engineer before application and shall be approved in writing prior to erection of formwork.

Visible corners: All visible corners shall have a 25mm X 25mm chamfer.

PSGA5-4 Concrete (Clause 5.4)

PSGA5-4.1 General (Sub clause 5.4.1.1)

The Contractor shall be solely responsible for the provision of suitable materials and the manufacturer of concrete of the required quality.

The specification for material to be used for concrete as included herein, shall not limit the Contractor's responsibility to manufacture concrete complying with the requirements of these specifications. If the Contractor finds it necessary to work to more stringent tolerances than specified, or the aggregates have to be processed in any way (e.g. by washing or scalping) to permit or to facilitate operations such as laying or finishing, all costs resulting there from shall be for the Contractor's own account. On the other hand, if the Contractor is of the opinion that the requirements of the specifications regarding the materials to be used will prevent him from manufacturing concrete of the required quality, he shall submit to the Engineer the necessary substantiating evidence. If such evidence is acceptable to the Engineer, he may amend certain requirements of the materials specification.

PSGA5-4.2 Consistency of concrete (Sub clause 5.4.1.2)

No compaction by hand will be allowed. Unless otherwise authorized by the Engineer, the slump of the concrete shall be as follows:

- Concrete compacted by vibration: 30-70mm

PSGA5-4.2 Strength of Concrete (Sub clause 5.4.1.5)

The classes of concrete to be used are specified in the Schedule of Quantities.

The Contractor shall design trial mixes for each strength specified in accordance with SABS 0100, Part II 1980, Appendix B. The target strength of the trial mix shall be determined using K equal 1, 7 and a standard deviation 5 MPa for a "good" degree of site control. The average 28 day cube strength of the trial mix shall be equal to or exceed the target strength with no test cube strength below the specified design strength. The Contractor shall submit the trial mixes and the 7 and 28 day test result to the Engineer for approval. No concreting may proceed until the trial mixes have been approved.

PSGA5-4.2.1 Ready – mixed concrete (Sub clause 5.4.1.6)

Ready – mixed concrete will be allowed on the site, provided that it complies with the requirements of this specification. The prior approval of the Engineer is however required,

PSGA5-4.10 Mixing (Sub clause 5.4.3)

Mixing at site

The following requirements shall apply to the mixing of concrete at the construction site:

- i. Mixing of materials for concrete shall be conducted by an experienced operator.
- ii. The sequence of charging the mixing plant shall have been approved before mixing commences and, unless otherwise directed, the approved sequence shall be maintained.
- iii. The total volume of material per batch shall not exceed the rated capacity of the mixer.
- iv. Before any concrete is mixed, the inner surfaces of the mixer shall be cleaned and all hardened concrete shall be removed. A slurry of cement, sand and water containing cement and sand in the ratio 1:2 and in sufficient quantity to cover the entire inside surface of the mixers shall be produced in the clean mixer and discharged immediately before the charging of the mixer with materials at the commencement of each concrete production run.
- v. The period of mixing shall be measured from the time when all the materials are in the drum or pan to the commencement of discharge. Subject to the provisions of (vi) below, the mixing period for each batch of 1.5m³ or less shall be at least 1.5 minutes and 1 minute for drum style and pan type mixers respectively for each batch or 1.5m³ or less and shall be increased

by 20 seconds and 15 seconds respectively for each additional cubic meter or part thereof. During this period, the drum or pan shall be rotated at the speed recommended by the manufacturer of the mixer. The maximum continuous mixing times at the recommended mixing speeds shall not exceed 10 minutes and 6 minutes per batch for drum type and pan type mixers respectively.

- vi. The Engineer will permit mixing periods to be reduced where he has approved the use of a mixer that complies with the requirements of 7.3.2 has been given and the Contractor's site control is rated as good.
- vii. Discharge shall be so carried out that there is no segregation of the materials in the mix. The mixer shall be emptied completely before it is recharged. If the mixer has been out of use for longer than 30 minutes, it shall be thoroughly cleaned out, particular attention being paid to the removal of any build-up of materials in the drum, in the loader, and around the blades of paddies.

Ready-mixed concrete

The Engineer will advise whether the production of concrete at a central concrete production facility other than on the construction site is permitted and whether the test results obtained by such a production facility as part of its quality control system are acceptable.

Where concrete is delivered to the site ready mixed, the requirements of SABS 878 shall apply.

PSGA5-4.11 Transportation (Sub clause 5.4.4)

Mixed concrete shall be discharged from the mixer and transported to its final position in such a manner that segregation, loss of ingredients and adulteration are prevented and that the mix is of the required workability at the point and time of placing.

PSGA5-4.12 Placing (Sub clause 5.4.5)

The Contractor shall give the Engineer adequate notice of his intention to place concrete. The concrete shall be placed in 45 minutes from the time of discharge from the mixer. Retempering by the addition of water or other material will not be permitted. The forms to be filled shall be clean internally. All excavations and other surfaces of an absorbent nature that are to come into contact with the concrete shall be left damp, but there shall be no free water on these surfaces.

Wherever possible, the concrete shall be deposited vertically into its final position to avoid segregation and displacement of reinforcement and other items that are to be embedded.

Deposited concrete shall not be so worked (whether by means of vibrators or otherwise) as to cause it to flow laterally in such a way that segregation occurs. Where possible, the concrete shall be brought up in horizontal layers of compacted thickness not exceeding 450mm and heaping shall be avoided.

Includes cement-and lime-treated soils, with or without curing membrane. In certain critical situations involving highly absorptive surfaces, pre-saturation is recommended.

Where a chute is used to convey the concrete, its slope shall be such that it will not cause segregation, and a suitable spout or baffles shall be provided for the discharge of the concrete. Concrete shall not be allowed to fall freely through a height of more than 3m unless otherwise approved.

The transport of concrete by pumping will not be permitted.

Once concreting has commenced it shall be carried on as a continuous operation between pre-arranged contraction or isolation joints.

At the option of the Contractor, and provided that the specified surface levels and tolerances are achieved, large areas of the pavement may be cast in a single operation and subsequently divided into individual panels by sawing.

PSGA5-4.13 Compaction (Sub clause 5.4.6)

All concrete shall be fully compacted during and/or immediately after placing, special measures being taken to compact concrete adjacent to formwork.

The concrete shall be thoroughly worked around reinforcement or embedded fixtures without displacing them.

The equipment employed, and the manner of its use, shall not cause segregation of the materials or excessive bleeding, shall be entirely suitable for compacting the concrete, and shall be approved the Engineer.

Where the slump is less than 70mm:

- And the thickness of the concrete exceeds 150mm, immersion vibrators shall be used over the whole area and depth of the concrete, including along the faces of all forms.
- And the thickness of the concrete is 150mm or less, immersion vibrators shall be used to compact areas adjacent to edges and forms.

In both cases, compaction with immersion vibrators shall be followed by one or more passes of a vibrating screed.

Where the slump exceeds 70mm, but does not exceed 120mm, immersion vibrators shall be used in areas adjacent to edges and their use confined to those areas.

In all cases where vibration is used, vibration shall be continued only until the mortar of the concrete just covers the particles of coarse aggregate

PSGA5-4.16 Damp-curing (Sub clause 5.4.7)

In the case of pavements finished by delayed steel trowelling, damp-curing shall start as soon after trowelling is possible without marring the finish and shall be by one of the following methods:

- Covering with thick hessian or with a layer of sand or clean moisture-retaining material kept continuously wet. (Polyethylene or similar sheeting over the moisture-retaining material will keep it damp for long periods of time).
- Covering the concrete with polyethylene or similar vapour-proof material in large sheets held firmly in place.
- Application of a wax based membrane-forming compound a rate of not less than 1 litre per 3.5m² of surface, but otherwise in accordance with the manufacturer's instructions

In case of the pavement to be finished by the early-age drying grinding techniques, damp-curing shall start as soon after wood – or bull-floating as is possible without marring the surface, and shall be by one of the methods given previously.

In all cases, curing shall be maintained continuously for minimum period of 10 days. In cold weather this period shall be extended.

PSGA5-4.17 Protection (Sub clause 5.4.7)

At all times the pavement shall be protected from damage or defacement due to any cause. Particularly, the edges of panels must be protected from damage during concreting of adjacent or other panels.

PSGA5-4.18 Curing under adverse weather (Sub clause 5.4.7)

When the ambient temperature exceeds 25°C, early implementation of effective curing to prevent or limit the loss of water from the concrete is important. Concrete placing should cease when the concrete temperature reaches 32°C.

PSGA5-4.19 Plastic-shrinkage cracking

Plastic-shrinkage cracking in concrete slabs is caused by rapid loss of moisture during the period before curing begins; this causes differential shrinkage which results in crack of up to 1m or more in length. They may be parallel to one another about 100mm to 700mm apart, but often occur in random, irregular pattern. Crack formation begins at the surface and continues downward for some distance, with cracks becoming narrower toward the bottom. Though usually only about 25 to 75mm deep, they may go all the way through the slab. They appear when the rate of drying is more rapid than the upward movement of bleeding water to the surface. Plastic-shrinkage cracking is influenced by factors such as wind velocity; the relative humidity of the atmosphere and the temperatures of the air and concrete.

Impervious vapour barriers under the concrete aggravate plastic-shrinkage cracking (and slab curling), since the bottom of the slab loses no moisture while the top dries rapidly.

If the rate of water evaporation from the concrete exceeds 1,0kg/m² per hour, precautions should be taken to reduce evaporation.

Some measures to prevent or reduce plastic-shrinkage cracking are:

- Dampen the sub grade if an impervious membrane is not used under slab
- Dampen the aggregates, especially if they are dry and absorptive
- Erect windbreaks and sunshades when slabs are constructed in exposed conditions
- Prevent rapid drying by one of the following measures
 - Protect concrete with moisture-retaining covering during any delay between placing and finishing
 - Use a fog spray above the surface to maintain a water sheen on the concrete before final finishing and start of curing
 - Cover with damp burlap or with polyethylene sheeting (white or exterior construction) immediately after screeding and full floating. Keep burlap moist until the concrete is ready for finishing. Uncover only a small area at a time, just ahead of finishing. Begin curing as soon as possible

- Use monomolecular films to reduce evaporation between the various placing and finished operations
- Postpone each step of finishing (and its inherent reworking) of the surface as long as possible without endangering results

PSGA6 Tolerances

PSGA 6-1 Basis of measurement

PSGA6-1.1 General (Sub clause 6.1.1)

All concrete, excluding blinding and mass concrete, shall comply with the specified tolerances, except where a different tolerance is shown on the drawings, in which case the specification on the drawing shall prevail.

PSGA6-2 Permissible deviations (Sub clause 6.4)

Degree of Accuracy I is required.

Surface regularity

The maximum permissible deviation of the surface from any straight line of length 3m joining two points on the surface, determined by means of a straight edge the ends of which are supported on blocks of identical thickness placed one over each of the two points, shall be 3mm.

The difference in level at any joint or other discontinuity in the pavement shall not exceed 1 mm for all classed of pavements.

Level

Deviations from designed level with reference to the nearest transferred datum (TD) of the upper or lower surface of any slab shall not exceed -10+0mm.

Thickness

Deviations in thickness shall not exceed 5mm.

PSGA7-2.1 Acceptance criteria (Sub clause 7.3)

Concrete from which test cubes have been taken shall be deemed to satisfy the requirements of this specification if:

- Any valid test result is more than 3 MPa below the specified strength (where three consecutive valid test results are obtained) and if
- The average of any three consecutive valid test results fails to exceed the specified strength by at least 2 MPa.

In all cases a valid test result is the average result obtained from the test of three test cubes of concrete in accordance with SABS Method 863.

PSL SABS 1200 L: MEDIUM PRESSURE PIPES

CONTENT

PSL 1 GENERAL

Add pay item 3.13.1 *Reverse Osmosis Plant*

Item		Unit
3.13.1	Reverse Osmosis Plant 50 000L/hr	Prov Sum
3.13.2	Percentage on item 3.13.1 for charges and profit	percentage %

1. The provisional sum shall include full compensation for the design and installation of the reverse osmosis plant making use of a nominated subcontractor. The requirement for the Sub-contractor should be as follows:
 - The supplier must have a minimum experience of 15 years in the industry
 - They must maintain the plant for a year
 - They must train the SDM Operators
2. The percentage shall include for all the contractors' charges and profit related item 3.13.1

PSLB SABS 1200 LB: BEDDING

CONTENT

PSLB 1	BEDDING CLASS
PSLB 2	SUPPLY OF BEDDING MATERIAL

PSLB 1 Bedding class (Sub-clause 3.3)

All flexible pipes should be laid on bedding as shown on drawing LB2(a) of SABS 1200LB except where special protection is required.

All rigid pipes shall be laid on class B bedding as specified in SABS 1200LB.

PSLB 2 Supply of bedding material (Sub-clause 3.1)

Selected bedding material can be obtained from trench and other necessary excavations. Cohesion less SAND may not be used. Maximum material size not to exceed 6 mm. Material should not be free draining as described in this particular clause. It shall have a density, after compaction, of not less than the in-situ soil and the Plasticity index must be between 12 and 16.

PARTICULAR SPECIFICATION PF: GENERAL MATERIAL AND CONSTRUCTION SPECIFICATION

CONTENTS

PF1	EXCAVATION AND TRENCHES
PF2	BLASTING
PF3	REPLACED OLD UNDERGROUND SERVICES
PF4	STORMWATER
PF5	SEWER (MATERIAL SPECIFICATION)
PF6	PLUMBING NEXT TO BUILDING
PF7	WATER
PF8	ALL STRUCTURES (MANHOLES, VALVE BOXES, STORMWATER INLET STRUCTURES, ETC.)
PF9	REQUIREMENTS FOR ALL HDPE PIPING, FITTINGS AND MANHOLES
PF10	CONSTRUCTION AND ON-SITE REQUIREMENTS
PF11	PIPE TESTING
PF12	FLUSHING OF WATER RETICULATION
PF13	ENGINEERS INSPECTION OF INSTALLED PIPES
PF14	TEMPORARY CONNECTIONS

PF1 EXCAVATION AND TRENCHES

All trenches and open works as well as excavations for foundations are to be inspected by a Competent Person (geo-professional/engineer) to assess if adverse ground conditions are present. These conditions may include surficial soil problems such as collapsible soil materials and geotechnical conditions such as shallow rock outcrops, dramatic soil strata changes, etc. This procedure allows for the adjustment of construction methods, i.e. improved foundation design, special bedding requirements, additional excavation and compaction, or pipe protection measurements.

The Competent Person (geo-professional/engineer) shall issue the person responsible for the construction written instructions regarding the safety precautions to be followed and the reports to be logged prior to the backfilling of excavations in the event of:

- a) a sudden change in the colour of the soils;
- b) rock outcrop;
- c) incompetent soil horizons;

Every excavation, including all shoring and bracing, shall be inspected by the Competent Person (geo-professional/engineer):

- 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.

Where trench excavated material is utilized for bedding, surround and backfill materials, the materials shall be compacted to at least 90 % Mod AASHTO or the density of the in-situ soil, except in rock, whichever is higher. Where imported materials are used for trench bedding, surround or backfill materials, laboratory permeability and density tests shall be conducted on both the in-situ trench material and the imported materials to ensure that the bedding, surround and backfill materials are less permeable than the in-situ soil after placement and compaction to at least 90 % Mod AASHTO.

The use of non-cohesive single size graded sand or crusher sand for bedding, surround blankets and backfill shall not be allowed. (P.I. be between 12 and 16)

PF2 BLASTING

If blasting is necessary, it is essential that appropriately experienced blasters be approached to determine the particular method and specification for blasting, regarded as appropriate in the context of the geological conditions.

PF3 REPLACED OLD UNDERGROUND SERVICES

Old mains that are to be abandoned must be removed and the trenches backfilled and compacted to a soil density in excess of the in-situ soil. Where old mains are under surfacing and where removal would be uneconomical, pipes are to be grouted using a suitably designed mixture. See Particular Specification PE.

PF4 STORMWATER

The general specification of materials and works are as follows:

PF4-1 Pipe Specification (Material Specification)

PF4-1.1 Concrete pipes

Concrete pipe with spigot and socket rubber ring joints (SABS 677)

PF4-1.2 PVC: Pipes

Water pipes to be uPVC with spigot and socket rubber ring joint. SABS 966-1

Sewer pipes to be uPVC with spigot and socket rubber ring joint. SABS 791 Heavy duty - Class 34 (solid wall).

PF4-2 Manhole Specification

PF4-2.1 Concrete manholes and inlet structures

All concrete manholes shall be reinforced water retaining structures. Inlet pipes to be provided with puddle flange or key joints to ensure watertight fixing into walls or construct structure with flexible watertight inlets.

PF4-2.2 Precast concrete manholes and inlet structures

All precast concrete manholes shall be in accordance with SANS 1294 and be rendered watertight.

PF4-3 Concrete culverts

Rectangular concrete portal culverts (SANS 986)

PF4-4 Manhole Testing

Stormwater manholes and junction boxes are to be sealed and tested for 0 % leakage. Each manhole and junction box shall be sealed and then filled to the brim and independently tested for zero leakage over a minimum period of 48 hours. Same shall apply for concrete manholes.

PF4-5 Pipe testing

All stormwater pipes and fittings must be watertight. All laid stormwater pipes should be tested for leakage using the standard SABS water test at a pressure of between 100 and 150 kPa for a minimum period of two hours. Testing to be as otherwise specified in Clause 7 of SABS 1200 LD.

All sewers and structures to be tested to zero percent leakage for water tests.

PF4-6 Cover to storm water pipes

A	Average	0.75 m
B	Outside traffic areas	0,60m (min)
C	Inside traffic areas	1,0 m (min)

PF5 SEWER (MATERIAL SPECIFICATION)

The general specification of materials and works are as follows:

PF5-1 Sewer Pipes**PF5-1.1 HDPE Pipes**

All HDPE pipes to be in accordance with to SANS 4427.

PF5-1.2 PVC Pipes (underground)

Sewer PVC Pipes to be in accordance with SABS 791 Heavy duty - Class 34 (solid wall).

PF5-1.3 Pipe testing

All sewerage pipes and fittings must be watertight. All laid PVC drainage and sanitary sewer pipes should be tested for leakage using the standard SABS water test at a pressure of between 100 and 150 kPa for a minimum period of two hours. Testing to be as otherwise specified in Clause 7 of SABS 1200 LD..

Welded HDPE pipe systems to be pressure tested to relevant pipe pressure class and manufacturer's specification.

All sewers and structures to be tested to zero percent leakage for water tests.

PF5-2 Sewer Manholes**PF5-2.1 Precast concrete manholes and inlet structures**

All precast concrete manholes shall be in accordance with SANS 1294 and be rendered watertight. Channels through manholes shall be half round clay pipes bedded in concrete as per the contract drawings. Connections of PVC pipes to clay channels in manholes are to be with appropriate clay to PVC adapters bedded in concrete.

PF5-2.2 Manhole Testing

Sewer manholes and junction boxes are to be sealed and tested for 0 % leakage. Each manhole and junction box shall be sealed and then filled to the brim and independently tested for zero leakage over a minimum period of 48 hours.

PF5-2.3 Cover to pipes

	Average	0.75 m
b	Outside traffic areas	0,60m (min)
c	Inside traffic areas	1,0 m (min)

PF5-2.4 Protection of underground pipes

All house connection joints on the main reticulation shall be encased in concrete to prevent damage during cleaning (rodding) operations.

PF6 PLUMBING NEXT TO BUILDING

PF6-1 Pipes

The sewer pipe work above ground shall be solid wall uPVC to SABS 967 fixed against the building.

PF7 WATER

The general specification of materials and works are as follows:

PF7-1 Pipes**PF7-1.1 PVC Pipes**

PVC pressure pipes are to be in accordance with SANS 966-1, (class 9 and Class 12) with all bends and T pieces in PVC. Specials such as fire hydrant T pieces, valve connections etc. are to be cast iron.

PF7-1.2 Steel Pipes

- a) Steel water pipes, where permitted above ground shall be of hot dipped heavy-duty galvanized steel pipes to SANS 62. Pipes are to be hard stamped with the SANS mark, manufactured details as well as batch numbers.
- b) Screw threads shall be cut as far as possible prior to galvanizing.
- c) No welding will be permitted after galvanizing.
- d) All screw threads, pipe ends and joints shall be treated with a mastic compound in accordance with the Manufacturer's Specifications on completion of the installation.
- e) Alternative steel pipes with suitable internal and external corrosion protection and flexible, self-anchoring connections.
- f) Flanged steel pipes are to be protected with suitable internal and external corrosion protection after completion of welding work;

PF7-1.3 Testing

All site services to be tested to the required SANS and manufactured specification for the particular pipe class to ensure zero percent leakage.

PF7-2 Manholes / Valve boxes

Valve boxes on manholes are to be cast in-situ watertight reinforced concrete or brick work as specified on drawings. All manholes shall be watertight.

PF7-3 Valve box marking

All valves, meters, fire hydrants, pressure reducing valves, manholes and junction boxes shall be clearly marked with numbers to be supplied to the Contractor. Marking shall be by numbering cast into the concrete on top of structures. Marking symbols and numbers to be approved by the Sekhukhune District Municipality. (Stainless steel Plate 200 mm X 40 mm X 5 mm)

PF7-4 Valves

All valves on water mains to be fitted with a clockwise closing, non rising spindle. Valves shall be flanged resilient seal gate valves.

PF7-5 Fire hydrants/Water filling points

Above ground fire hydrants are to be tamper proof, right angled, right hand closing hydrants in accordance with SANS 1128.

Below ground 80 mm fire hydrants/filling points are to be cast iron, fitted with London Vee Thread, right hand closing hydrants in accordance with SANS 1128. Inlet flange drilling to standard SABS hydrant drilling with four holes at 165mm Pitch Circle Diameter (PCD).

PF7-6 Water Meters

PF7-6.1 Scope

This section provides a generic description of the requirements of water meters and associated equipment.

The general requirements for the following items are included:

a) Data Logger and Software Specification:

The specifications provide a generic scope of the system requirements as well as the potential operational functions for onsite logging as well as remote sensing by means of GSM modules;

b) Requirements for plastic (composite) bodied, semi-positive rotary type, protected dial, domestic water meters. (15 mm water meters)

The specifications cover the requirements for basic 15 mm water meters for connections to single buildings and residential developments. The Competent Person (engineer) must ensure that the consumption demand does not exceed the flow and accurate measuring capabilities of the meters.

c) Requirements for Ultra High Performance Woltman type, mechanical, turbine, flanged bulk water meters. (40 to 150 mm mechanical water meters with electronic logging capabilities)

The specification covers the requirements for basic 40 to 150 mm mechanical water meters with electronic logging capabilities. The requirements for mechanical meters larger than 150 mm diameter requires a specific submission and approval by the Sekhukhune District Municipality Engineer.

d) Electromagnetic Flow Meter Specifications (meters larger than 150 mm)

The specification is specifically targeting the installation of water meters larger than 150 mm in diameter. Electromagnetic Flow meters smaller than 150 mm must only be considered based on the financial viability and consistency with the rest of the installation should it form part of a network with multiple large water meters.

PF7-6.2 Data Logger and Software Specification

All data loggers supplied to the Sekhukhune District Municipality shall be accompanied by the appropriate software as well as training appropriately appointed Sekhukhune District Municipality staff

PF7-6.3 Loggers

Options for single channel, two channel or 4 channel loggers must be available. Logger channels must be easily user-configurable for logging flows (digital inputs) and/or pressures (analogue inputs) in any permutation. All ports on the logger must be fitted with durable, type connectors and sealing caps for watertight closure of the port, when not in use.

The minimum memory requirements are as follows:

- | | |
|--------------------------------|-------|
| a) For single channel loggers; | 128kB |
| b) For twin channel loggers; | 256kB |
| c) For four channel loggers; | 512kB |

Efficient memory utilisation is a pre-requisite and under no circumstances must any event (pulse or pressure reading) take up more than 3 bytes of the logger's memory.

Loggers must provide both time and event based data storage. In order to provide quick access of the stored data, the memory should be allocated to three unique and distinct memory banks as follows:

- a) Record detailed event logging – i.e. all events must be stored in this memory bank;

- b) Record time-based hourly values;
- c) Record time-based daily values

The event-based data and the time-based hourly and daily data must provide true (not averaged!) maximum, minimum and average flow values. The software will automatically draw data from the memory bank best suited for the type of graphical representation required by the user.

Loggers must be capable of communication speeds of equal to or better than 19.6k Baud.

The loggers are to be programmed and interrogated via a RS232 interface. It must furthermore have hardware and software capability for later upgrading to GSM communication.

The internal electronics should incorporate rigid, solid state, surface mounted technology (SMT).

Loggers should be completely waterproof to IP68 insulation standard. A separate battery compartment must be user accessible, without having to disturb the insulation seal on the main logger. The logger and batteries should be housed in a lightweight, durable aluminium enclosure, with a solid metal carry handle, which may be used for securing the unit by lock and chain.

The logger should be powered by standard, commercially available leak-proof, alkaline batteries, typically 6 x 1½ V Duracell® size “AA” or similar. It must be possible to change the batteries without having to return the logger to the manufacturer. Power consumption of the logger must be such that useful battery life of 1 - 2 years can be achieved under normal operating conditions.

Each logger must be equipped with a robust, alphanumeric LC-display window from which on-site information could be easily obtained, via a cascading menu, without having to connect the logger to a PC. On-site information available via the LCD display must include at least the following:

- a) Channel parameters as programmed for each channel;

Logger parameters as programmed;

- Starting date and time;
- Ending date and time

- b) Status of the logger;

- Battery voltage;
- Memory used;
- Current date and time;
- Logger self-diagnostic errors;
- Logger serial number

- c) Logged values for each “flow” (digital) channel;

- Channel ID;
- Instantaneous flow rate reading;
- Built in totaliser reading;
- Date and time when maximum flow rate occurred and maximum flow rate;
- Option to reset the above date, time and maximum flow rate;
- Date and time when minimum flow rate occurred and minimum flow rate;
- Option to reset the above date, time and minimum flow rate;

- d) Logged values for each “pressure” (analogue) channel;

- Channel ID;
- Instantaneous pressure reading;
- Date and time when maximum pressure occurred and maximum pressure;
- Option to reset the above date, time and maximum pressure reading;
- Date and time when minimum pressure occurred and minimum pressure;
- Option to reset the above date, time and minimum pressure reading;

The loggers will accept a 2-wire, voltage free, reed-switch type pulse input as well as a high frequency, opto-type pulse input for logging to high resolution. It must be possible to log forward and reverse flows using opto-type pulsers. All pulsers must be fitted with the appropriate type plug, for connecting to the data logger.

Pressure transducers for logging pressures must be available as a separate item. Built-in pressure transducers will not be acceptable, as this type renders the entire logger useless when the accuracy of the transducer drifts. Transducers offered must be capable of logging pressures up to 2000 kPa to accuracy equal to or better than $\pm 1\%$ of FS at constant temperature. All pressure transducers must be fitted with the appropriate type plug, for connecting to the data logger.

0-20mA or 4-20mA Analogue interfaces with data logger connector plugs must be available from the supplier in the event of a requirement to log from analogue 24V loop-powered sources.

Loggers must have a built-in, real-time clock, accurate to better than or equal to the following specification:

$$\text{deviation} < 10^{-4} \text{ at } 10^{\circ}\text{C} \leq T \leq 30^{\circ}\text{C}$$

The only method of setting the date and time must be through the transfer of the PC's system time to the built-in real time clock.

PF7-6.4 Logger software

Logger software supplied to the Sekhukhune District Municipality shall conform to the following

User-friendly, purpose-written, Windows®-based software must be available for the programming and interrogation of the loggers, for file management and evaluation of the logged files, as well as for the computer system configuration.

The software must be user configurable for upgrade to programming and readout of loggers via the cell-phone (GSM) network.

The software must provide the option for the user to either create a new data file when doing the download, or to string the data onto a previously downloaded file, without having to resort to conversion into ASCII-format or importing into commercially available software packages, such as Quattro®, Lotus® or Excel®, for that purpose. Conversion of logged files into ASCII-format must however be available as a standard option.

It must be possible to do on-site on-line monitoring of a logger connected to a water meter, via a lap-top PC, for real time graphical and/or tabular display of flow and/or pressure. The system must allow for this type of monitoring through the use of the RS232 interface and via the GSM cell phone network.

It must be possible to generate line graphs of flows and/or pressures and bar graphs of minimums, maximums and average flows and/or pressures as well as bar or pie charts of daily, hourly (or shorter periods) of volumes.

It must be possible to superimpose graphs and to summate or subtract graphs for generating a graph reflecting a net result. It must be possible to combine graphs logged from a combination water meter for instance, to reflect a single graph of total consumption to a consumer.

It must be possible to change the resolution of any generated graph between course, fine and all values logged.

The software must have a well-developed statistical function.

Zooming and panning of any generated graph must be performed with ease.

PF7-6.5 Requirements for plastic (composite) bodied, semi-positive rotary type, protected dial, domestic water meters.

Meters installed under this category must be a plastic (composite) bodied, semi-positive rotary type, protected dial, domestic water meters, for the measurement of cold, clean potable water and must conform to the following dimensions and specifications:

Nominal Bore	Body Lengths (Excluding connectors)	Minimum Metrological Class	Max Working pressure	Max Temp
15mm	115mm	"C"	1600kPa	40°C

Meters must conform to the specifications of SANS1529-, it must be tested and sealed in compliance with SANS 10378 in a SANS approved laboratory in South Africa.

The meters must be suitable for horizontal or vertical installation, whichever installation position must not affect metrological performance.

The design of the meter must be very compact and robust. Material of construction must be a high-performance glass-fibre reinforced polyamide polymer (PPA), which provides exceptional structural strength. In addition to this, the threaded connections of the meter must be positioned against the meter body in such a manner that the possibility of it breaking off is minimized.

These meters shall perform to accuracy of better than $\pm 2\%$ error over the meter's operating range; i.e. between Q_t and Q_p (Q_n), and must meet or exceed Metrological Class "C".

The design of the meter dictates that the piston axis of the meter be positioned in the vertical plane (when the meter is installed horizontally) to ensure superior starting flow and low flow measuring characteristics.

Meters must be fitted with registers, which comprise 4 digit cyclometer type totalisers, registering in kiloliters (kl) or cubic meters (m^3), and another 4 digits on a red background to indicate submultiples of m^3 or kl. The registers must be protected from the water being measured, must be lubricant filled to prevent condensation from forming under the register lens and to ensure ease of reading.

The register lenses must be made from a thick, transparent polycarbonate material to prevent cracking or discolouring, designed to withstand harsh environmental conditions and to facilitate ease of reading.

Non-return valves must be fitted to prevent reverse flow through the meters.

The serial number of the meter must be clearly visible from the position that the meters are normally read.

Meters must have a pulse output facility, which will accept an optional reed switch, which provides a potential free pulse equal to 2 pulses per 1 litre (or 1 pulse per 0,5 litre).

Meters must have the facility to accept an optional inductive type High Resolution Impulse (HRI) pulser unit for providing pulses, or a radio transmission unit for Automatic Meter Reading (AMR).

Meters shall not be affected by outside magnetic influences.

Meter should offer very low friction loss characteristics at Q_p (Q_n).

The manufacturer must have a proven track record for the supply of plastic bodied, domestic meters in Southern Africa.

In addition to the requirements of SANS1529-1:2006, the following test in the presence of the engineer is also required:

- a) Witness testing of a random sample of 5 meters in the SANS accredited test laboratory, on the test rig normally used for the testing and calibration of these meters. Special attention will be given by the engineer to the actual performances of the meters offered, rather than the minimum performance as laid down by SANS1529-1:2006 for Class C specifications.

PF7-6.6 Requirements for Ultra High Performance Woltman type, mechanical, turbine, flanged bulk water meters. (40 to 150 mm mechanical water meters with electronic logging capabilities)

Water meters tendered for under this category, for sizes NB 40mm up to and including NB 150mm, must be, in-line through-flow Woltman type, mechanical turbine flanged bulk water meters and must conform to the following dimensions and specifications:

Nominal Bore	Body Lengths	Flange Specs	Working Pressure Maximum	Temp Maximum
40mm	220mm	BS4504 Table 16*	1600kPa	50°C
50mm	200mm	BS4504 Table 16*	1600kPa	50°C
80mm	225mm	BS4504 Table 16*	1600kPa	50°C
100mm	250mm	BS4504 Table 16*	1600kPa	50°C
150mm	300mm	BS4504 Table 16*	1600kPa	50°C

*BS4504 Table 16 is equivalent to SABS1123 Table 1600/3

Dual-drilled or multi-drilled flanges will not be acceptable to the engineer as this practice may weaken the flanges.

All Woltman type mechanical meters supplied in terms of this contract shall perform to an accuracy of better than $\pm 2\%$ error over the meter's operating range; i.e. between Q_t and Q_p (Q_n). The performance characteristics of the meters offered, when installed horizontally, must be equal to or better than the values listed below:

Size DN	Q_{start} m ³ /h	Q_{min} m ³ /h	Q_t m ³ /h	Q_n (Q_p) m ³ /h	Q_{max} (Q_s) m ³ /h
40mm	0,05	0,2	0,32	40	60
50mm	0,05	0,15	0,4	50	90
80mm	0,1	0,2	0,51	120	200
100mm	0,11	0,3	0,81	230	300
150mm	0,3	0,8	1,6	450	600

Meters must be fitted with dry dial registers, which comprise 6 digit cyclometer-type totalisers, registering in kiloliters (kl) or m³. These registers must be hermetically sealed to prevent ingress of dirt or moisture. The registers, which are to be fitted as standard, must be able to provide one high frequency opto-type pulse output function and one HRI (High Resolution Impulse) functions. All meters shall be fitted with a HRI and opto-type pulsers, normally associated with data logging,

it is required that the meter be upgradeable to AMR (Automatic Meter Reading), which facilitates the fitment of "intelligent" registers, or the fitment of HRI and/or Radio Transmitters at a later stage. Tenderers are to provide full details of their capabilities in this regard.

The manufacturer must have a proven track record for the supply of plastic bodied, domestic meters in Southern Africa if not supplied as a metal body.

Cover bolts must be of stainless steel material to facilitate easy removal of mechanisms. Meter bodies must be coated with a high quality sintered epoxy powder coating, both internally and externally, to provide maximum protection against corrosion.

Although most of the meters will be installed horizontally, it must be possible to install the meters vertically (with flow in the upward direction) or in an inclined position (with flow in the upward direction), should site conditions make this necessary.

Manufactures must provide full details of the minimum lengths of straight pipe required upstream and downstream for each size of meter offered, to ensure that the accuracy of the meters remain within the stated limits, under normal operating conditions.

The performance of the meters offered shall not be affected by outside magnetic influences.

A suitable place must be provided for on the meter body, which may optionally be drilled and tapped for a pressure connection, for connecting a pressure transducer, for data logging.

The manufacturer must provide details of any approvals which they may have from any authority, locally or overseas, permitting them to exchange meter mechanisms – or to fit new, calibrated mechanisms into used or existing meter bodies, without loss of measuring accuracy.

Details of head loss across the meters offered must be provided.

The manufacturer must provide details of meter-compatible strainers (if required), which can be offered by them, to protect the meters against possible damage as a result of foreign matter in the water.

PF7-6.7 Electromagnetic Flow Meter Specifications

Electromagnetic Flow Meter Specifications can be specified in terms of the following criteria

PF7-6.8 Sensor Tube

The electromagnetic flow meter sensor tube for sizes 25mm to 300mm shall conform to the following specification:

- a) Utilize Faraday's law as a measuring principal with electrically conductive fluids;
- b) Have an aluminum alloy measuring insert featuring a rectangular measuring port for conditioning of the flow within the meter body;
- c) The internal protection coating shall not exceed a 0.3mm thickness and must withstand operating temperatures of -5°C to 70°C and pressures of 1kPa to 4000 kPa;
- d) The manufacturer must guarantee that the internal coating has a lifespan similar to the entire sensor tube;
- e) Body pressure rated 16 bar;
- f) Nominal flange pressure will be PN16;
- g) The tube should have a corrosion resistant coating with a minimum thickness of 150µm;
- h) Electrical conductivity $\geq 20 \mu\text{S/cm}$;
- i) The tube should be able to accommodate flow velocity in sensor - 18.....18m/sec;
- j) Installation requirements... inlet and outlet runs can be zero pipe diameters;
- k) Process connections for DN 25 – 300mm can be PN 10 or PN16;
- l) Measuring electrodes will be stainless steel 1.4301 / AISI 304;
- m) Grounding Electrode stainless steel 1.4301 / AISI 304;
- n) Electromagnetic approvals and standards to conform as follows;
Electromagnetic compatibility – Directive 89/336/EEC, Harmonised standard WEN 61326-1:2006.
- o) Low voltage Directive 2006/95/EC, Harmonised standard : EN 61010: 2001;
- p) Custody transfer to MI-001 and OIML R-49;
- q) Tube must be available with a direct burial option if required;
- r) Requires zero straight pipe lengths on inlet or outlet side of meter

PF7-6.9 Calibration certificate.

A manufacturer's calibration certificate, showing calibration twice at two calibration points, shall be supplied with each flow sensor.

The measuring uncertainty of the meters will be equal to or better than $\pm 0.5\%$ of actual flow for flow velocities $> 0.5 \text{ m/s}$.

PF7-6.10 Signal Convertor – IP68 Compact Mount

The battery powered convertor should conform to the following.

- a) Offer a battery life of 15 years with no external battery packs;
- b) The display shall be a high contrast high resolution type;
- c) Display to consist of 8 digits, display of positive and negative counter, sum counter, flow rate. Will also give status indication for battery, flow/ counter direction and empty pipe condition;

- d) Settable units will be cubic meters, while flow rate will be cubic meters per hour;
- e) Repeatability will be $\pm 0.1\%$ ($v > 0.5\text{m/s}/1.5\text{ft/sec}$);
- f) Operate within following temperature ranges ($-40\text{ deg C} \dots + 65\text{ deg C}$);
- g) Handle a conductivity of $\geq 20\ \mu\text{S/cm}$;
- h) In sensor flow velocity of $-18 \dots 18\text{m/sec}$;
- i) Powered by lithium cells that provides for a 15 year battery life;
- j) Have pre alarm 1 year before battery depletion and final alarm;
- k) Battery replacement will be possible without loss of totalizer data;
- l) Outputs will be 2 x passive pulse outputs for remote totalizing $f \leq 500\text{ Hz}; I \leq 10\text{ mA}; U: 5 \dots 24\text{ VDC}$ ($P \leq 100\text{mW}$), also 2 passive status outputs ($I \leq 10\text{mA}; U: 5 \dots 24\text{VDC}$ ($P \leq 100\text{mW}$));
- m) Have facility for external communication to a data logger / GSM protocol/ SMS protocol to SCADA system;
- n) Housing to be IP68/67 (NEMA 4/4X/6P);
- o) Converter manufactured from Polycarbonate material with IP68 Mil Spec connector for plug and play data logging;
- p) Shock and vibration resistance to IEC 68-2-3;
- q) For custody transfer be in accordance to MI-001 and OIML R-49;
- r) Double safety with double O Ring construction;
- s) Hermetically sealed against water ingress or condensation.

PF7-6.11 Leakage detection capability

The meter must be able to monitoring the lowest flow or volume during selected time window within 24 hours. Leakage detection must be configurable over a selectable period where monitored if value exceeds the possible leakage level. The minimum and maximum values must be stored with date registration. Last stored value visible on the display.

PF7-7 Pressure Reducing Valves

As specified in the Bills of Quantity

PF7-8 Strainers

As specified in the Bills of Quantity

PF7-9 Vent Valves

As specified in the Bills of Quantity

PF7-10 Special Steel Fittings

As specified in the Bills of Quantity

PF8 ALL STRUCTURES (MANHOLES, VALVE BOXES, STORMWATER INLET STRUCTURES, ETC.)

Ensure backfilling around structures are properly backfilled with suitable material that will have a density after compaction of not less than the in-situ soil (no building rubble or coarse aggregate exceeding 63 mm in diameter shall be allowed). Compact to a minimum of 93 % Mod AASHTO density.

PF9 REQUIREMENTS FOR ALL HDPE PIPING, FITTINGS AND MANHOLES

PF9-1 Scope

This material specification outlines the requirements for the manufacture of PE-HD (High Density Polyethylene) Pipes & Fittings to be utilised.

PF9-2 Quality assurance

It is the responsibility of the manufacturer/supplier to establish Quality Assurance by means of quality control procedures, which shall ensure that the product will meet the requirements

of this specification. The manufacturer/supplier shall maintain a quality system that conforms to the requirements of the SABS ISO 9001:2000 or national equivalent. Applicable standard for manufacture of pipe shall be SANS 4427. HDPE pipes and fittings welders are to be certified under the Thermoplastics Welding Institute of South Africa (TWISA). Welding shall comply to SANS 10268, SANS 10270, SANS 10269, SANS 1655, SANS 1671, SANS 6269.

All HDPE Pipes shall be indelibly marked at 1 meters intervals with the following details: Supplier name - SANS ISO 4427 – Pipe OD - Pipe OD tolerance - Wall thickness - Nominal pressure - Material designation - Batch NO – application (Important note: This number should always be on top of the pipe after installation)

PF9-3 Removal of welding beads from HDPE pipes

After butt-welding of HDPE pipes the welding bead must be removed from all solid wall sewer and sleeve pipes (all diameters) and stormwater pipes smaller than 200mm diameter.

The Engineer must inspect the Contractors equipment for this work and instruct the Contractor to weld and remove beads of the various pipe types to be used on site. These examples of the removed beads must be kept on site for the duration of the project. The removed beads must show no signs of cracking (cut too cold) or extreme deformation (cut too hot)

All welding beads removed from the installed pipes shall be marked sequentially with the same number as the weld. All welded joints must be sequentially numbered with an imprint on the welded bead directly after welding. The location of weld positions must be transferred to an as-build drawing.

The Contractor must store the removed welding beads to the end of the retention period.

It is important to note that:

- 1 The bead cut direction is the same as the liquid flow direction;
- 2 The bead cutter must be fitted with equipment to extract the bead after cutting;
- 3 The machine must be able to cut the bead in one operation. Multiple cuts may lead to uneven or sharp burr ends on the pipe surface.

Please note that the internal welding beads of water pipes must not be removed.

PF10 CONSTRUCTION AND ON-SITE REQUIREMENTS

PF10-1 Offloading of pipes and fittings

The manufacturer's instructions regarding the offloading of all steel, PVC and HDPE pipes, fittings and manufactured items must be strictly adhered to. The specification of such procedures must be in the office of the contractor at all times. The Engineer must be provided with a copy of such procedures. The pipes must be offloaded by hand or mechanical crane.

This offloading area must be free of rocks, boulders or any other foreign objects that may puncture, cut or scar the steel/HDPE/PVC fittings, pipes and other manufactured items. The area must also be relatively level in one direction and the ponding of stormwater must not be permitted. The area must be kept in such condition for the duration of material being on site.

PF10-2 Handling of pipes on site

The manufacturer's specification for the handling and transporting of material on site must be strictly adhered to.

Under no circumstances shall the dragging of pipes on site be allowed. Dragging of the pipe will result in cuts, scratches and puncture marks that may result in weakening of the pipe.

PF10-3 Pipes – Visual inspection of defects

The representative of the Principal Agent must inspect all pipes for any visual defects such as cracks, deformation, wall thinning etc. This in no means constitute approval of the pipes. It merely serves as an additional quality control measure to ensure that pipes with obvious defects are rejected from the beginning.

Pipes found to have such defects must be brought under the attention of the supplier in writing. The suppliers must respond in writing. Copies of such cases must be forwarded to the Sekhukhune District Municipality and the engineer.

PF10-4 Pipe marking

All plastic pipes shall bear the official SANS mark in addition to the manufacturer's details. All steel pipes shall bear the official hard stamped SANS mark in addition to the manufacturer's details.

PF11 PIPE TESTING

PF11-1 Hydraulic field Testing

The Hydraulic field testing of HDPE pipes shall be subject to a maximum system pressure of 1,25 times the maximum pressure as defined by the Manufacturers pipe class.

PF11-2 Testing of large diameter sewer and stormwater pipes

The testing of large diameter stormwater pipes by means of an air test shall incorporate the use of inflatable plugs to seal the ends.

PF12 FLUSHING OF WATER RETICULATION

No system with a diameter smaller than 32 mm may be connected to the main reticulation unless the main reticulation is thoroughly flushed. The same applies to the entire smaller systems prior to the installation of water meters. The portion of pipe work to individual buildings must also be flushed in reverse from pressure sustaining valves towards the meter prior to connection of the meter. All strainers must be cleaned and checked by the engineer prior to handing over the system.

The entire system should be monitored for blockages after installation. Blockages are the responsibility of the Contractor for the duration of the contract up to final delivery.

PF13 ENGINEERS INSPECTION OF INSTALLED PIPES

The Engineer shall inspect all pipes and fittings prior to backfilling of trenches.

All pipes with cut, scratch, punctures marks or signs of deforming must be rejected from a quality control perspective. In such cases the Contractor must submit a certificate of approval from the pipe supplier. This document must clearly state that the supplier approves the integrity of the pipes irrespective of the noted damages.

If such an approval certificate is not supplied the Engineer must reserve the right to reject such parts of the installation as he/she see fit. Any dispute in this regard must be referred to the Sekhukhune District Municipality. All welds must also be inspected for obvious visual defects.

The Engineer must also inspect the pipe for correct manufacturer markings.

PF14 TEMPORARY CONNECTIONS

All temporary connections to water sewer and stormwater systems shall not be backfilled unless with the express instruction, in writing, of the Engineer. The installation shall, as a rule, be left open and be protected

from stormwater drainage as well as barricaded as per the contractual standards until the permanent connections are made.

C3.4.2. SITE ESTABLISHMENT

C3.4.2.1: SITE FACILITIES AVAILABLE

a) SOURCE OF WATER SUPPLY AND SEWERAGE CONNECTION

The Contractor shall make his own arrangements with the relevant authorities for obtaining water for construction and domestic purposes as well as toilet facilities as required by the Health and Safety Regulations. The Contractor shall pay for the water at the rates and tariffs as determined by the local authority, including the cost of supplying a temporary standpipe as required.

b) SOURCE OF POWER SUPPLY

The Contractor shall make his own arrangements for obtaining power and be responsible for all costs involved.

C3.4.2.2: LOCATION OF CAMP SITE

The Contractor must make his own arrangements for Camp Sites at the different locations of works. The location of the Contractors' camp including the material storage areas will be subject to the Engineer's approval.

C3.4.2.3: 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 respect 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.

No housing on site shall be allowed.

C3.4.2.4: SITE FACILITIES REQUIRED

C3.4.2.4.1: FACILITIES FOR THE ENGINEER

Housing and office facilities requirements are measured and included in the Schedule of Quantities as provisional amounts and will be claimed by the consultant from the contractor.

C3.4.2.4.2: SITE INSTRUCTION BOOK

A triplicate book supplied by the Contractor to be used for site instruction shall at all times be kept on the site.

C3.4.3: FEATURES REQUIRING SPECIAL ATTENTION

C3.4.3.1 DEALING WITH WATER

The Contractor is responsible for the control of stormwater from adjoining areas, the site and groundwater. No additional payment will be made and it will be deemed to be included in the rates of the relevant items.

C3.4.3.2 SURVEY BEACONS

The Employer will provide benchmarks with levels and coordinates as and when necessary. The Contractor's attention is drawn to Clause 5.1.2 of SABS 1200 A.

C3.4.3.3 RECORD DRAWINGS

As the Works proceed the Contractor must keep detailed records of all changes to the plans. The actual position of all new and existing services must be indicated on the set of drawings supplied free of charge for this purpose.

The certificate of practical completion will only be issued once the Engineer has received the record drawings. No separate payment will be made for this and it will be deemed to be included in the rates for the relevant items.

C3.4.3.4 SAFETY

The Contractor must take the safety of the residents and their property into account during the planning and execution of the works. All open trenches, services, material and machines must be protected and clearly marked.

C3.4.3.5 MINIMAL DISTURBANCE TO ENVIRONMENT

The site is situated in an area of significant environmental importance. As a result, the area must be disturbed as little as possible and environmental control measures implemented.

The site and surroundings are to be kept clean from building rubble, waste etc. throughout the duration of the contract. Roads used for transporting material shall be kept clean, and dirt free on a daily basis. No separate payment will be made for this and it will be deemed to be included in the rate for the relevant items.

Stacking of cut-down trees and vegetation on-site is not allowed, as this is a possible fire-hazard.

C3.4.3.6 SITE MAINTENANCE

During the progress of the work upon its completion, the site of the works shall be kept and left in a clean and orderly condition. The contractor shall at all times store materials and equipment for which he is responsible in an orderly manner, and shall keep the site free from debris and obstruction.

C3.4.3.7 TESTING AND QUALITY CONTROL

The contractor shall engage the services of an approved independent testing laboratory for the testing of materials and the quality testing of layer works, to ensure that his work conforms to the specifications. No separate payment will be made for such testing by an approved laboratory, the costs of which will be deemed to be included in the contractor's tendered rates for the various items of work requiring testing in accordance with the specifications.

C3.4.3.8 EXISTING SERVICES

The positions of existing services will be indicated by the Employer or his agents. The Contractor shall note that although the drawings have been prepared using available information, they show only the approximate positions of existing services and shall be a guide only. The Contractor's attention is drawn to clause 5.4 of SABS 1200 A.

Before the Contractor commences operations, he must discuss with and have the approval of the Employer, authority or owner concerned regarding the method he proposes to use for relocating or safe-guarding any services and existing works he may encounter during construction.

The positions of existing services shown on the Drawings are given in good faith and no guarantee can be given that:

- a) these services actually are in the approximate positions indicated.
- b) that these are the only services in the vicinity, and
- c) that the nature and description of these services are correct.

The Contractor shall be responsible to locate and safeguard any existing service or work he may encounter during construction and shall obtain clearance from the Employer, authority and the Engineer before commencing work in the proximity of existing services or works.

The Contractor shall be responsible for any damage to such existing services and works in the execution of this contract and shall reimburse the Employer, authority or the owner concerned for any repairs required and for damages.

The Contractor shall be responsible for immediately notifying the Engineer and the authorities concerned regarding any damage caused to public services and existing works.
The Authority concerned shall carry out any alternations to public services unless the Contractor is instructed otherwise.

The Contractor shall provide the necessary assistance during any operations necessary in connection with the removal, alternations or safeguarding of any public service.

C3.4.3.9 CERTIFICATES OF PAYMENT

The statement to be submitted by the Contractor in terms of clause 6.10 of the General Conditions of Contract (2015) shall be prepared in accordance with the standard payment certificate prescribed by the Engineer and shall consist of at least two sets of A4-sized paper copies.

All costs resulting from the preparation and submission of the statements shall be borne by the contractor.

C3.4.3.10 CONSTRUCTION IN LIMITED AREAS

In certain cases, working space may be limited. The method of construction in these restricted areas will depend largely on the contractor's plant. However, the contractor must note that measurement and payment will be according to the specified cross-sections and dimensions irrespective of the method used to achieve these cross-sections and dimensions, and that the rates and prices tendered shall be deemed to include full compensation for any difficulty encountered while working in limited areas and narrow widths, and that no extra payment will be made, nor will any claim for payment due to these difficulties be considered.

C3.4.3.11 SPOIL MATERIAL

No indiscriminate spoiling of material will be allowed. All surplus or unsuitable material shall be spoiled at a site to be provided by the contractor. Such site shall meet with the approval of the local authority within whose area it falls, and the spoiling shall comply with all the statutory and municipal regulations.

C3.4.3.12 DRAWINGS

Any information in the possession of the contractor, which is necessary for the resident engineer to complete his "record" drawings, must be submitted to the resident engineer before a certificate of completion will be issued.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Engineer. The Engineer will supply any figured dimensions, which may have been omitted from the drawings.

C3.4.3.13 LENGTH OF TRENCHES

Where no limitations are imposed by construction stages and unless otherwise permitted in writing by the Engineer, **not more than 100 m of trench in any one place** shall be opened in advance of pipe laying operations.

No trench may be left open over the builders' holidays or weekends.

C3.4.3.14 SAMPLES

The contractor shall at his own cost, supply all samples that may be required. Material or work not conforming to the approved samples shall be rejected. The Engineer reserves to himself the right to submit samples to any tests to ensure that the material represented by the sample conforms to the requirements of the specifications.

C3.4.3.15 MANUFACTURER'S INSTRUCTIONS

The recommendations of the manufacturers of patented materials must be strictly adhered to regarding the use, mixing, application, fastening, etc. thereof except when otherwise instructed in writing by the Engineer.

C3.4.3.16 PROPRIETARY MATERIALS

Where proprietary materials are specified it is to indicate the quality or type of materials or articles required, and where the terms "or other approved" or "or approved equivalent" are used in connection with proprietary materials or articles, it is to be understood that the approval shall be at the sole discretion of the Engineer.

C3.4.3.17 NOTICES, SIGNS, BARRICADES AND ADVERTISEMENTS

The contractor shall erect the necessary signs, notices and barricades for the duration of the contract in order to safeguard both the works and the public.

Notices, the Engineer may use signs and barricades as well as advertisements only upon approval, and the contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Engineer shall have the right to have any sign, notice or advertisement moved to another position or to have it removed from the site of the works, should it in any way prove to be unsatisfactory, inconvenient or dangerous to the general public.

Such notices, signs and barricades shall be provided and erected at the contractor's own expense.

The standard name board of the South African Association of Consulting Engineers is specified, the cost of which shall be included in the rates tendered for under Section 1200 A of the Bill of Quantities.

C3.4.3.18 SETTING OUT OF WORK

The Engineer at the commencement of the Contract will show reference and level beacons to the Contractor and the Contractor will be responsible for transferring the data to the Site of Works.

The Contractor shall check the condition and accuracy of all reference and level beacons and satisfy himself that they have not been disturbed and are true with regard to position and level. A beacon that has been disturbed shall not be used until its true position and level have been re-established and the Engineer has certified the new values. The Contractor shall thereafter be held entirely responsible for the protection of all reference and level beacons.

The Contractor shall employ a capable surveyor to set out the Works to the required lines and levels. The Engineer shall be informed immediately should any discrepancy be discovered between the levels or dimensions obtained by the Contractor and those shown on the drawings.

Where a beacon is likely to be disturbed during construction operations, the Contractor shall establish suitable reference beacons at locations where they will not be disturbed during construction. No beacons shall be covered over, disturbed or destroyed before accurate reference beacons have been established and details of the positions and levels of such beacons have been submitted to the Engineer. The Contractor's reference beacons shall be of at least the same accuracy and sturdiness of construction as the existing beacons.

The Contractor shall submit the method of setting out he proposes to employ to the Engineer. The Contractor shall provide accurate control offline and level at all stages of construction.

The Engineer may check work set out by the Contractor and the Contractor at his own expense shall rectify any errors found. The Contractor shall supply any instrument, equipment, material and labour required by the Engineer for this survey work. Any assistance, including checking given to the Contractor by the Engineer or any setting out done by the Engineer for Contractor shall not be held as relieving the Contractor of his responsibility for the accurate construction of the Works.

The Contractor's survey instruments and survey equipment shall be suitable for the accurate setting out of the Works and shall be subject to the approval of the Engineer. They shall furthermore be checked and correctly adjusted by the authorized agents before the commencement of the contract and subsequently when required by the Engineer and when otherwise necessary.

When required the Contractor shall, at his own expense, provide one labourer to assist the Engineer. The Engineer shall have the sole right of approving of such a labourer. Survey work shall not be measured and paid for directly and compensation for the work involved in setting out shall be deemed to be covered by the rates tendered and paid for the various items of work included under the contract.

C3.4.3.19 WORKMANSHIP AND QUALITY CONTROL

The onus to produce work which 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 experienced engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment, to ensure adequate supervision and positive control of the works at all times.

The costs of all supervision and process control, including testing thus carried out by the contractor shall be deemed to be included in the rates tendered for the related items of work.

The contractor's attention is drawn to the provisions of the various standardized specifications regarding the minimum frequency of testing that will be required for process control. Only test results from a SANAS Accredited Laboratory will be accepted.

The contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion of every part of the work and submission thereof to the Engineer for examination, the contractor shall furnish the Engineer with the results of all relevant tests, measurements and levels to indicate compliance with the specifications.

C3.4.3.20 TRANSPORT OF MATERIAL

All costs of transporting material, including overhaul, shall be included in the applicable tendered rates. All references in the specifications to transport, overhaul and haul distances shall be deleted irrespective of whether or not the deletion is included in these Specification Data.

C3.4.3.21 EMPLOYMENT OF PREVIOUSLY DISADVANTAGED LOCAL LABOUR

Where possible the contractor must make use of unemployed local labour. It is a requirement of this Tender that all unskilled work be performed by local labourers and recorded on the latest available Labour report forms and submitted to the Municipality for reporting.

C3.4.3.22 LIAISON WITH LOCAL AUTHORITIES

The contractor will have to liaise with local authorities regarding the following matters:

- (a) Dealing with traffic.
- (b) Locating of existing underground services.
- (c) Protection of existing services during construction.

All the relevant authorities were notified of above operations. It is then the contractor's onus to immediately contact all these authorities and to accommodate their involvement in his programme of work. The contractor should also warn the authorities at least 48 hours before the actual work commence. Compensation for delays, losses or accidents will not be considered should the contractor at any time have failed to keep the local authorities informed.

The engineer or employer must immediately be notified, should the contractor experience any problem regarding work, which involves a local authority.

C3.4.3.23 WAYLEAVES, PERMISSIONS AND PERMITS

The Contractor shall be responsible for obtaining all of the necessary wayleaves, permissions or permits applicable to working near any existing services or other infrastructure on Site, and shall ensure that any wayleaves, permissions or permits obtained by the Employer's Agent prior to the award of the contract are transferred into the Contractor's name.

The Contractor shall abide by any conditions imposed by such wayleaves, permissions or permits.

The Contractor shall ensure that all wayleaves, permissions and permits are kept on site and are available for inspection by the relevant service authorities on demand.

The Contractor shall also ensure that any wayleaves in respect of electricity services are

PART C4: SITE INFORMATION

- **SECTION CONTENTS**

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C4.1 Extract from the Transport Infrastructure Act 2001(Act No. 8 of 2001)

The term “MEC” shall be interpreted to mean the “Member of the Executive Council for The Department of Transport Roads and Community Safety in the Province of Limpopo”.

The Member of the Executive Council for The Department of Roads and Transport, Community Safety in the Province of Limpopo has made the regulations set out in the Schedule in terms of the Limpopo Transport Infrastructure Act, 2001 (Act No. 8 of 2001).

ENTRY UPON OR TAKING POSSESSION OF LAND FOR CERTAIN PURPOSES

20. (1) Subject to subsections (2), (4), (5) and (6), the MEC may enter upon any land with the necessary workers, machines, vehicles, equipment, tools, instruments or materials to perform or carry out on, below the surface of or in connection with that land, an investigation, survey, observation or other act that the MEC deems necessary for or in connection with the construction or maintenance of any transport infrastructure or take possession temporarily of land for a purpose in connection with the construction or maintenance of such infrastructure.
- (2) Where the owner or occupier of the land has not consented to the MEC acting in terms of subsection (1), the MEC must give the owner or occupier of the land written notice of the MEC's intention so to act not less than seven days before the land is entered, setting out the purpose for which entry upon the land is authorized, the acts that may be performed on the land in connection with that purpose and the persons by whom, the means whereby or the manner in which they are to be performed.
- (3) If the owner or occupier objects to the proposed actions, he or she may state those objections in writing not less than 48 hours before the proposed entry on the land, in which case the MEC must consider the objections. If the MEC is of the opinion that the objections are not well founded or it is in the public interest to act in spite of the objections, the MEC must notify the owner or occupier accordingly before entering on the land.
- (4) The provisions of subsection (1) may not be used to gain access to a dwelling house or other building on the land in use for residential purposes unless the occupier of the house or other building agrees to the MEC entering it for the purpose of performing or carrying out there in an activity mentioned in subsection (1).

CAMPS, STORAGE OF MATERIALS, TAKING OF WATER

20. (5). Where the MEC in terms of subsection (1) takes possession temporarily of land for -
- (a) the erection or construction of a building, hut, tent or other structure for the accommodation of workers employed on transport infrastructure or executing other work in connection therewith;
- (b) the storing thereon of stores, plant, machinery, equipment or anything else the MEC deems necessary for the construction and maintenance of transport infrastructure,

the MEC must pay to the owner rental as is agreed upon, or, failing agreement as determined in accordance with section 30, in which case costs shall be calculated and awarded in accordance with section 31.

OPENING OF FENCES AND ROADS TO QUARRIES

20. (6) For the purpose of exercising the rights under this section, the MEC may, after notice to the owner, make roadways or openings in fences, walls and hedges, provided that such openings must be effectively closed against trespassing or straying animals during the operations and the fence properly restored on completion of the work, and that any excavation made in the course of the work which may be a source of danger must be securely fenced off, filled in or otherwise rendered safe on completion of the works.

ACQUISITION OF MATERIAL

21. (1) The MEC may, subject to subsection (2), take and remove or cause to be taken and removed from land material which is necessary for the construction or maintenance of transport infrastructure, and may take possession temporarily of such land for the purpose of acquiring the material.

ADMINISTRATOR MAY SELECT PLACE FOR OBTAINING MATERIAL

21. (2) (a) The MEC may select a place from which the material contemplated in subsection (1) may be taken, and must give the owner notice of the place; and
- (b) the owner may, within 14 days after receipt of the notice, point out another place within the same cadastral boundaries on the land concerned and if the MEC is of the opinion that the other place is suitable and accessible and will provide suitable material, the materials must be taken from the place pointed out by the owner.
- (3) Where the MEC takes material under this section, the MEC must restore or rehabilitate the land in accordance with applicable environmental laws and -
- (a) where such restoration or rehabilitation does not have the effect of restoring the land entirely to its former state; or
- (b) where the owner has suffered loss or damage by the taking of the material;
- the MEC must pay to the owner such compensation for any loss or damage to the land, as may be agreed or failing agreement as determined in accordance with section 30, in which case costs shall be calculated and awarded in accordance with section 31.
- (4) Section 20(6) shall apply to the taking of material under this section.

CONTRACTORS MAY EXERCISE RIGHTS

56. (2) Subject to subsection (3), a power or duty granted to the MEC, provided that where compensation is payable as a result of exercising the right or power, it may be recovered from the MEC who may in turn recover it from the contractor or agent.

“MEC” INCLUDES AUTHORISED “AGENT”

56. (2) Subject to subsection (3), a power or duty granted to the MEC, provided that where compensation is payable as a result of exercising the right or power, it may be recovered from the MEC who may in turn recover it from the contractor or agent.

OBSTRUCTION OF MEC

52. (1) Despite any other law, but subject to subsection (4), no person or institution, including an organ of state as defined in section 239 of the Constitution, may, unless authorized by this Act -
- (o) obstruct or hinder the MEC or an official, employee or agent of the Department or another person authorized by the MEC in the execution of his or her duties under this Act;
- (2) A person who contravenes a provision of subsection (1) or any other provision of this Act that is not elsewhere declared to be an offence, commits an offence.

C4.2 General Information

C4.2.1 Disclaimer

This section provides general information of the site, as well as results and conclusions derived from various investigations and tests done on natural surface materials along the route.

The information is given in good faith and there is no guarantee that it is entirely representative of all the materials and conditions that may be encountered, the intention being to give an indication of the materials and conditions most likely to be encountered.

No responsibility whatsoever for any consequence arising from variations between the actual conditions, and those indicated in this document will be accepted.

The specifications and drawings shall always overrule this section of the documents.

C4.2.2 Project Location

Refer to Section C3 PS 24.

C4.2.3 Climate

Refer to Section C3 PS 24.

C4.2.4 Services

The following services occur along the route:

- | | | | |
|-----|-----------------|---|--------------|
| (a) | Telephone lines | : | Telkom |
| (b) | Power lines | : | Eskom |
| (c) | Water pipelines | : | Municipality |

The services that require relocation and/or protection are shown on the layout drawings and are listed in the services schedule. The information given is based on the best available information, and no guarantee as to the accuracy thereof can be given. Before any work may commence, the contractor shall verify the actual position of each service on site, and bring to the attention of the engineer any service that is not recorded on the drawings. As the contractor is not authorised to remove or replace any of the facilities, he shall:

- a) Give preliminary notice in writing to the relevant service provider, that the services on the site will require removal or protection prior to any works being carried out in the vicinity of each facility. The contractor shall advise the service provider of the number of services, their locations and ID numbers, and the proposed dates when work will commence in the vicinity of each service.
- b) In addition to the above preliminary notice, give the service provider 14 days written notice of the intention to commence work in the vicinity of each facility.
- c) Upon completion of the work in the vicinity of each service, the contractor shall notify the service provider in writing that the work is complete and the service may be reinstated.

The contact details of the relevant service owners are as follows:

1. Telkom

Information to be obtained by the appointed contractor.

2. Eskom

Information to be obtained by the appointed contractor.

3. Sekhukhune District Municipality

Private Bag X 8611

Groblersdal

0470

Project Manager, Mr Itumeleng Mokhele,

Tel: 082 421 5599

C4.2.6 Construction materials

In-situ material will be used where feasible. The bulk of the material will be imported from commercial sources identified by the Contractor.

C4.3: Locality Plan

Included in the Book of Drawings

PART C5: ANNEXURES

(For Information Purposes Only)

SECTION CONTENTS

C5.1	Annexure I - Environmental Management Plan	C-116
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C5.1 Annexure I - Environmental Management Plan

A.1 LEGISLATION/ REGULATIONS

The relevant sections of Mineral and Petroleum Resources Development Act and its supporting Regulations are *summarised below* for the information of applicants. The onus is on the applicant to familiarise him/herself with the provisions of the full version of the Mineral and Petroleum Resources Development Act and its Regulations.

Section of Act	Legislated Activity/ Instruction/ Responsibility or failure to comply	Penalty in terms of Section 99
5(4)	No person may prospect, mine, or undertake reconnaissance operations or any other activity without an approved EMP, right, permit or permission or without notifying land owner	R 100 000 or two years imprisonment or both
19	Holder of a Prospecting right must: lodge right with Mining Titles Office within 30 days; commence with prospecting within 120 days, comply with terms and conditions of prospecting right, continuously and actively conduct prospecting operations; comply with requirements of approved EMP, pay prospecting fees and royalties	R 100 000 or two years imprisonment or both
20(2)	Holder of prospecting right must obtain Minister's permission to remove any mineral or bulk samples	R 100 000- or two-years imprisonment or both
26(3)	A person who intends to beneficiate any mineral mined in SA outside the borders of SA may only do so after notifying the Minister in writing and after consultation with the Minister.	R 500 000 for each day of contravention
28	Holder of a mining right or permit must keep records of operations and financial records AND must submit to the DG: monthly returns, annual financial report and a report detailing compliance with social & labour plan and charter	R 100 000- or two-years imprisonment or both
29	Minister may direct owner of land or holder/applicant of permit/right to submit data or information	R 10 000
38(1)(c)	Holder of permission/permit/right MUST manage environmental impacts according to EMP and as ongoing part of the operations	R 500 000- or ten-years imprisonment or both.
42(1)	Residue stockpiles must be managed in prescribed manner on a site demarcated in the EMP	A fine or imprisonment of up to six months or both
42(2)	No person may temporarily or permanently deposit residue on any other site than that demarcated and indicated in the EMP	A fine or imprisonment of up to six months or both
44	When any permit/right/permission lapses, the holder may not remove or demolish buildings, which may not be demolished in terms of any other law, which has been identified by the Minister or which is to be retained by agreement with the landowner.	Penalty that may be imposed by Magistrate's Court for similar offence
92	Authorised persons may enter mining sites and require holder of permit to produce documents/ reports/ or any material deemed necessary for inspection	Penalty as may be imposed for perjury
94	No person may obstruct or hinder an authorised person in the performance of their duties or powers under the Act.	Penalty as may be imposed for perjury
95	Holder of a permit/right may not subject employees to occupational detriment on account of employee disclosing evidence or information to authorised person (official)	Penalty as may be imposed for perjury
All sections	Inaccurate, incorrect or misleading information	A fine or imprisonment of up to six months or both
All sections	Failure to comply with any directive, notice, suspension, order, instruction, or condition issued	A fine or imprisonment of up to six months or both

A.2 OTHER RELEVANT LEGISLATION

Compliance with the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and its Regulations does not necessarily guarantee that the applicant is in compliance with other Regulations and legislation. Other legislation that may be immediately applicable includes, but are not limited to:

- National Monuments Act, 1969 (Act 28 of 1969).
- National Parks Act, 1976 (Act 57 of 1976)
- Environmental Conservation Act, 1989 (Act 73 of 1989)
- National Environmental Management Act, 1998 (Act No. 107 of 1998)
- Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965)
- The National Water Act, 1998 (Act 36 of 1998)
- Mine Safety and Health Act, 1996 (Act 29 of 1996)
- The Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).

A.3 WORD DEFINITIONS

In this document, unless otherwise indicated, the following words will have the meanings as indicated here:

Act (The Act)	Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
Borehole	A hole drilled for the purposes of prospecting i.e. extracting a sample of soil or rock chips by pneumatic, reverse air circulation percussion drilling, or any other type of probe entering the surface of the soil.
CARA	The Conservation of Agricultural Resources Act
EIA	An Environmental Impact Assessment as contemplated in Section 38(1) (b) of the Act
EMP	an Environmental Management Plan as contemplated in Section 39 of the Act
Fauna	All living biological creatures, usually capable of motion, including insects and predominantly of protein-based consistency.
Flora	All living plants, grasses, shrubs, trees, etc., usually incapable of easy natural motion and capable of photosynthesis.
Fence	A physical barrier in the form of posts and barbed wire and/or “Silex” or any other concrete construction, (“palisade”- type fencing included), constructed with the purpose of keeping humans and animals within or out of defined boundaries.
House	any residential dwelling of any type, style or description that is used as a residence by any human being
NDA	National Department of Agriculture
NWA	National Water Act, Act 36 of 1998
Pit	Any open excavation
“Porrel”	The term used for the sludge created at alluvial diamond diggings where the alluvial gravels are washed and the diamonds separated in a water-and-sand medium.
Topsoil	The layer of soil covering the earth which- (a) provides a suitable environment for the germination of seed; (b) allows the penetration of water; (c) is a source of micro-organisms, plant nutrients and in some cases seed; and (d) is not of a depth of more than 0,5 metres or such depth as the Minister may prescribe for a specific prospecting or exploration area or mining area.
Trench	A type of excavation usually made by digging in a line towards a mechanical excavator and not pivoting the boom – a large, U-shaped hole in the ground, with vertical sides and about 6 – 8 metres in length. Also a prospecting trench.
Vegetation	Any and all forms of plants, see also Fauna
DWAF	The Department of Water Affairs and Forestry – both national office and their various regional offices, which are divided across the country on the basis of water catchment areas.
MPRDA	the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
EMP Plan	An Environmental Management Plan as contemplated in Regulation 52 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) – this document.

B. UNDERTAKING (Example):

I, the Director (NAME), the Contractor hereby undertake to implement the measures as described in Sections F and G hereof. I understand that this undertaking is legally binding and that failure to give effect hereto will render me liable for prosecution in terms of Section 98 (b) and 99 (1)(g) of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). I am also aware that the Regional Manager may, at any time but after consultation with me, make such changes to this plan as he/she may deem necessary.

Signed on this day of 2012 at (Place)

.....

Signature

F. ENVIRONMENTAL MANAGEMENT PLAN:

F1. INTRODUCTION

This Environmental Management Plan contains guidelines, operating procedures and rehabilitation/pollution control requirements which will be binding on the holder of the mining permit/prospecting permission/ reconnaissance permission after approval of the Environmental Management Plan. It is essential that this portion be carefully studied, understood, implemented and adhered to at all times.

- A copy of the layout plan as provided for in Regulation 2.2 must be available at the prospecting/mining site for scrutiny when required.
- The plan must be updated on a regular basis with regard to the actual progress of the establishment of surface infrastructure, mining operations and rehabilitation (a copy of the updated plan shall be forwarded to the Regional Manager on a regular basis).
- A final layout plan must be submitted at closure of the mine or when operations have ceased.

NOTE: Regulation 2.2 of the regulations promulgated in terms of the Act requires:

“An application contemplated in sub-regulation (1) must be accompanied by a plan that must contain –

- (a) the co-ordinates of the land or area applied for;*
- (b) the north point;*
- (c) the scale to which the plan has been drawn;*
- (d) the name, number and location of the land or area covered by the application; and*
- (e) in relation to farm boundaries and surveyed points-*
 - (i) the size and shape of the proposed area;*
 - (ii) the boundaries of the land or area comprising the subject of the application concerned;*
 - (iii) the layout of the proposed reconnaissance, prospecting, exploration, mining or production operations;*
 - (iv) surface structures and servitudes;*
 - (v) the topography of the land or area; “*

F 1.1 Demarcation

F 1.1.1 Demarcating the Mining/Prospecting Area

- The mining/ prospecting area must be clearly demarcated by means of beacons at its corners, and along its boundaries if there is no visibility between the corner beacons.
- Permanent beacons as indicated on the layout plan or as prescribed by the Regional Manager must be firmly erected and maintained in their correct position throughout the life of the operation.
- Mining/ prospecting and resultant operations shall only take place within this demarcated area.

F 1.1.2 Demarcating the River Channel and Riverine Environment

The following is applicable if operations are conducted within the riverine environment (See F 3.2):

- Beacons as indicated on the layout plan or as prescribed by the Regional Manager must be erected and maintained in their correct position throughout the life of the operation.
- These beacons must be of a permanent nature during the operations and must not be easily removable, especially those in a river channel. The beacons must, however, be removed at the end of the operations.
- The mining of and prospecting for any mineral shall only take place within this demarcated mining area.
- If riverine vegetation is present in the form of reeds or wetland vegetation, the presence of these areas must be entered in Part C 1.45 of the EMP and indicated on the layout plan.
- The holder of the mining permit/ prospecting right will also be required to permanently demarcate the areas as specified in F 1.1.1.

F 1.2 RESTRICTIONS ON MINING/ PROSPECTING

- On assessment of the application, the Regional Manager may prohibit the conducting of mining or prospecting operations in vegetated areas or over portions of these areas
- In the case of areas that are excluded from mining or prospecting, no operations shall be conducted within 5m of these areas.

F 1.3 RESPONSIBILITY

- The environment affected by the mining/ prospecting operations shall be rehabilitated by the holder, as far as is practicable, to its natural state or to a predetermined and agreed to standard or land use which conforms with the concept of sustainable development. The affected environment shall be maintained in a stable condition that will not be detrimental to the safety and health of humans and animals and that will not pollute the environment or lead to the degradation thereof.
- It is the responsibility of the holder of the mining permit/ prospecting right to ensure that the manager on the site and the employees are capable of complying with all the statutory requirements which must be met in order to mine, which includes the implementation of this EMP.
- If operations are to be conducted in an area that has already been disturbed, the holder must reach specific agreement with the Regional Manager concerning the responsibilities imposed upon himself/herself pertaining to the rehabilitation of the area and the pollution control measures to be implemented.

F 2 INFRASTRUCTURAL REQUIREMENTS

F 2.1 TOPSOIL

- Topsoil shall be removed from all areas where physical disturbance of the surface will occur.
- All available topsoil shall be removed after consultation with the Regional Manager prior to the commencement of any operations.
- The topsoil removed, shall be stored in a bund wall on the high ground side of the mining/prospecting area outside the 1:50 flood level within the boundaries of the mining area/ prospecting.
- Topsoil shall be kept separate from overburden and shall not be used for building or maintenance of access roads.
- The topsoil stored in the bund wall shall be adequately protected from being blown away or being eroded.

F 2.2 ACCESS TO THE SITE

F 2.2.1 Establishing access roads on the site

- The access road to the mining/prospecting area and the camp-site/site office must be established in consultation with the landowner/tenant and existing roads shall be used as far as practicable.
- Should a portion of the access road be newly constructed the following must be adhered to:
 - The route shall be selected that a minimum number of bushes or trees are felled and existing fence lines shall be followed as far as possible.
 - Water courses and steep gradients shall be avoided as far as is practicable.
 - Adequate drainage and erosion protection in the form of cut-off berms or trenches shall be provided where necessary.
- If imported material is used in the construction or upgrading of the access road this must be listed in C2.17.
- The erection of gates in fence lines and the open or closed status of gates in new and existing positions shall be clarified in consultation with the landowner/tenant and maintained throughout the operational period.

- No other routes will be used by vehicles or personnel for the purpose of gaining access to the site.

NOTE: The design, construction and location of access to provincial roads must be in accordance with the requirements laid down by the Provincial or controlling authority.

F 2.2.2 Maintenance of access roads

- In the case of dual or multiple use of access roads by other users, arrangements for multiple responsibility must be made with the other users. If not, the maintenance of access roads will be the responsibility of the holder of the mining permit/ prospecting right.
- Newly constructed access roads shall be adequately maintained so as to minimise dust, erosion or undue surface damage.

F 2.2.3 Dust control on the access and haul roads

- The liberation of dust into the surrounding environment shall be effectively controlled by the use of, inter alia, water spraying and/or other dust-allaying agents. The speed of haul trucks and other vehicles must be strictly controlled to avoid dangerous conditions, excessive dust or excessive deterioration of the road being used.

F 2.2.4 Rehabilitation of access roads

- Whenever a mining permit/ prospecting right is suspended, cancelled or abandoned or if it lapses and the holder does not wish to renew the permit or right, any access road or portions thereof, constructed by the holder and which will no longer be required by the landowner/tenant, shall be removed and/or rehabilitated to the satisfaction of the Regional Manager.
- Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre mining/ prospecting situation.
- Roads shall be ripped or ploughed, and if necessary, appropriately fertilised (based on a soil analysis) to ensure the regrowth of vegetation. Imported road construction materials which may hamper regrowth of vegetation must be removed and disposed of in an approved manner prior to rehabilitation.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation, be corrected and the area be seeded with a seed mix to the Regional Manager's specification.

F 2.3 OFFICE/CAMP SITES

F 2.3.1 Establishing office / camp sites

- Office and camp sites shall be established, as far as is practicable, outside the flood plain, above the 1 in 50 flood level mark within the boundaries of the mining/ prospecting area.
- The area chosen for these purposes shall be the minimum reasonably required and which will involve the least disturbance to vegetation. Topsoil shall be handled as described in F 2.1 above
- No camp or office site shall be located closer than 100 metres from a stream, river, spring, dam or pan.
- No trees or shrubs will be felled or damaged for the purpose of obtaining firewood, unless agreed to by the landowner/tenant.
- Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a fire-break shall be cleared around the perimeter of the camp and office sites.
- Lighting and noise disturbance or any other form of disturbance that may have an effect on the landowner/tenant/persons lawfully living in the vicinity shall be kept to a minimum.

F 2.3.2 Toilet facilities, waste water and refuse disposal

- As a minimum requirement, the holder of a mining permit/ prospecting right shall, at least, provide pit latrines for employees and proper hygiene measures shall be established.
- Chemical toilet facilities or other approved toilet facilities such as a septic drain shall preferably be used and sited on the camp site in such a way that they do not cause water or other pollution.
- The use of existing facilities must take place in consultation with the landowner/tenant.
- In cases where facilities are linked to existing sewerage structures, all necessary regulatory requirements concerning construction and maintenance should be adhered to.
- All effluent water from the camp washing facility shall be disposed of in a properly constructed French drain, situated as far as possible, but not less than 200 metres, from any stream, river, pan, dam or borehole.
- Only domestic type wash water shall be allowed to enter this drain and any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognised facility.
- Spills should be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognised facility.
- Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., shall be stored in a container at a collecting point and collected on a regular basis and disposed of at a recognised disposal facility. Specific precautions shall be taken to prevent refuse from being dumped on or in the vicinity of the camp site.
- Biodegradable refuse generated from the office/camp site, processing areas vehicle yard, storage area or any other area shall either be handled as indicated above or be buried in a pit excavated for that purpose and covered with layers of soil, incorporating a final 0,5 metre thick layer of topsoil (where practicable). Provision should be made for future subsidence of the covering.

F 2.3.3 Rehabilitation of the office/camp site

- On completion of operations, all buildings, structures or objects on the camp/office site shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), which states:
 - (1) *When a prospecting right, mining right, retention permit or mining permit lapses, is cancelled or is abandoned or when any prospecting or mining operation comes to an end, the holder of any such right or permit may not demolish or remove any building, structure, object -*
 - (a) *which may not be demolished in terms of any other law;*
 - (b) *which has been identified in writing by the Minister for purposes of this section;*
or
 - (c) *which is to be retained in terms of an agreement between the holder and the owner or occupier of the land, which agreement has been approved by the Minister in writing.*
 - (2) *The provision of subsection (1) does not apply to bona fide mining equipment which may be removed*
- Where office/camp sites have been rendered devoid of vegetation/grass or where soils have been compacted owing to traffic, the surface shall be scarified or ripped.
- Areas containing French drains shall be compacted and covered with a final layer of topsoil to a height of 10cm above the surrounding ground surface.
- The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a vegetation seed mix to his or her specification.

- Photographs of the camp and office sites, before and during the mining/ prospecting operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of the Regional Manager.

F 2.4 VEHICLE MAINTENANCE YARD AND SECURED STORAGE AREAS

F 2.4.1 Establishing the vehicle maintenance yard and secured storage areas

- The vehicle maintenance yard and secured storage area will be established as far as is practicable, outside the flood plain, above the 1 in 50 flood level mark within the boundaries of the mining/prospecting area.
- The area chosen for these purposes shall be the minimum reasonably required and involve the least disturbance to tree and plant life. Topsoil shall be handled as described in F 2.1 above.
- The storage area shall be securely fenced and all hazardous substances and stocks such as diesel, oils, detergents, etc., shall be stored therein. Drip pans, a thin concrete slab or a facility with PVC lining, shall be installed in such storage areas with a view to prevent soil and water pollution.
- The location of both the vehicle maintenance yard and the storage areas are to be indicated on the layout plan.
- No vehicle may be extensively repaired in any place other than in the maintenance yard.

F 2.4.2 Maintenance of vehicles and equipment

- The maintenance of vehicles and equipment used for any purpose during the mining/prospecting operation will take place only in the maintenance yard area.
- Equipment used in the mining/prospecting process must be adequately maintained so that during operations it does not spill oil, diesel, fuel, or hydraulic fluid.
- Machinery or equipment used on the mining/prospecting area must not constitute a pollution hazard in respect of the above substances. The Regional Manager shall order such equipment to be repaired or withdrawn from use if he or she considers the equipment or machinery to be polluting and irreparable.

F 2.4.3 Waste disposal

- Suitable covered receptacles shall be available at all times and conveniently placed for the disposal of waste.
- All used oils, grease or hydraulic fluids shall be placed therein and these receptacles will be removed from the site on a regular basis for disposal at a registered or licensed disposal facility.
- All spills should be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognised facility.

F 2.4.4 Rehabilitation of vehicle maintenance yard and secured storage areas

- On completion of mining/prospecting operations, the above areas shall be cleared of any contaminated soil, which must be dumped as referred to in section F 2.4.3 above.
- All buildings, structures or objects on the vehicle maintenance yard and secured storage areas shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002.
- The surface shall then be ripped or ploughed to a depth of at least 300mm and the topsoil previously stored adjacent the site, shall be spread evenly to its original depth over the whole area. The area shall then be fertilised if necessary (based on a soil analysis).
- The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.

F 3 OPERATING PROCEDURES IN THE MINING AREA

F 3.1 LIMITATIONS ON MINING/PROSPECTING

- The mining of or prospecting for precious stones shall take place only within the approved demarcated mining or prospecting area.
- Mining/ prospecting may be limited to the areas indicated by the Regional Manager on assessment of the application.
- The holder of the mining permit/ prospecting right shall ensure that operations take place only in the demarcated areas as described in section F 1.1.2 above.
- Operations will not be conducted closer than one and a half times the height of the bank from the edge of the river channel and in such manner that the stability of the bank of the river is affected.
- Precautions shall also be taken to ensure that the bank of the river is adequately protected from scouring or erosion. Damage to the bank of the river caused by the operations, shall be rehabilitated to a condition acceptable to the Regional Manager at the expense of the holder.
- Restrictions on the disturbance of riverine vegetation in the form of reeds or wetland vegetation must be adhered to. The presence of these areas must be entered in Part of the programme and indicated on the layout plan.

F 3.2 MINING/ PROSPECTING OPERATIONS WITHIN THE RIVERINE ENVIRONMENT

NOTE: The Department of Water Affairs may impose additional conditions which must be attached to this EMP. In this regard, please see the Best Practice Guideline for small scale mining developed by DWA (BPG 2.1) (available from <http://www.dwa.gov.za>).

- The mining of or prospecting for precious stones in the river or the banks of the river will be undertaken only after the Regional Manager has consulted with the Department of Water Affairs.
- The canalisation of a river will not be undertaken unless the necessary permission has been obtained from the Department of Water Affairs. Over and above the conditions imposed by the said Department, which conditions shall form part of this EMP Plan, the following will also apply:
- The canalisation of the flow of the river over different parts of the river bed shall be constructed in such a manner that the following are adhered to at all times:
 - ◆ The flow of the river may not be impeded in any way and damming upstream may not occur.
 - ◆ The canalisation of the flow may not result in scouring or erosion of the river-bank.
 - ◆ Well points or extraction pumps in use by other riparian users may not be interfered with and canalisation may not impede the extraction of water at these points.
- Access to the riverbed for the purpose of conducting excavations in the river-bed, shall be through the use of only one access at a time. The location of the access to the river channel across the river-bank shall be at a point of the river-bank where the least excavation and damage to vegetation will occur and shall not be wider than is reasonably required. The position of the river access together with all planned future access points, must be indicated on the layout plan.

F 3.2.1 Rehabilitation of access to river-bed

- When rehabilitating the access point, the original profile of the river-bank will be re-established by backfilling the access point with the original material excavated or other suitable material.
- The topsoil shall then be returned over the whole area to its original depth and if necessary fertilised and the vegetation allowed to grow.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects

on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.

- In the event of damage from an occurrence where high flood waters scour and erode access points in the process of rehabilitation over the river-bank or an access point currently in use, repair of such damage shall be the sole responsibility of the holder of the mining permit or prospecting right.
- Repair to the river-bank to reinstate its original profile to the satisfaction of the Regional Manager must take place immediately after such event has occurred and the river has subsided to a point where repairs can be undertaken.
- Final acceptance of rehabilitated river access points will be awarded only after the vegetation has re-established to a point where the Regional Manager is satisfied that the river-bank is stable and that the measures installed are of durable nature and able to withstand high river-flow conditions.

F 3.2.2 Rehabilitation of mining/prospecting area in the bed of the river

- The goal of rehabilitation with respect to the area where mining/prospecting has taken place in the river-bed is to leave the area level and even, and in a natural state containing no foreign debris or other materials and to ensure the hydrological integrity of the river by not attenuating or diverting any of the natural flow.
- All scrap and other foreign materials will be removed from the bed of the river and disposed of as in the case of other refuse (see section F 2.3.2 above), whether these accrue directly from the mining/prospecting operation or are washed on to the site from upstream.
- Removal of these materials shall be done on a continuous basis and not only at the start of rehabilitation.
- Where reeds or other riverine vegetation have been removed from areas, these shall be re-established systematically in the approximate areas where they occurred before mining/prospecting.
- An effective control programme for the eradication of invader species and other exotic plants, shall be instituted on a regular basis over the entire mining/prospecting area under the control of the holder of the mining permit/ prospecting right, both during mining/prospecting and at the stage of final rehabilitation.

F 3.2.3 The Water Use Licence

- The National Water Act, (Act 36 of 1998), is based on the principles of sustainability, efficiency and equity, meaning that the protection of water resources must be balanced with their development and use.
- In addition to being issued with a prospecting right or mining permit a small-scale miner may also need to get a **water use licence** for the proposed water uses that will take place, except in certain cases.

• *NOTE: The Department of Water Affairs (DWA) developed specific Best Practice Guideline for small scale mining that relates to stormwater management, erosion and sediment control and waste management. Copies of these guidelines can be obtained from the regional office of DME or DWA.*

Applications for a water use licence must be made in good time, such that approval can be granted before a water use activity can begin. The appropriate licence forms for each kind of expected water use should be completed together with supporting documentation. The main supporting document required is a technical report.

F 3.3 EXCAVATIONS

F 3.3.1 Establishing the excavation areas

Whenever any excavation is undertaken for the purpose of locating and/or extracting ore bodies of all types of minerals, including precious stone-bearing gravels, the following operating procedures shall be adhered to:

- Topsoil shall, in all cases (except when excavations are made in the river-bed), be handled as described in F 2.1 above.
- Excavations shall take place only within the approved demarcated mining/prospecting area.
- Overburden rocks and coarse material shall be placed concurrently in the excavations or stored adjacent to the excavation, if practicable, to be used as backfill material once the ore or gravel has been excavated.
- Trenches shall be backfilled immediately if no ore or precious stone-bearing gravel can be located.

F 3.3.2 Rehabilitation of excavation areas

The following operating procedures shall be adhered to:

- The excavated area must serve as a final depositing area for the placement of tailings during processing.
- Rocks and coarse material removed from the excavation must be dumped into the excavation simultaneously with the tailings.
- Waste, as described in paragraph F 2.3.2 above, will not be permitted to be deposited in the excavations.
- Once excavations have been refilled with overburden, rocks and coarse natural materials and profiled with acceptable contours and erosion control measures, the topsoil previously stored, shall be returned to its original depth over the area.
- The area shall be fertilised if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local or adapted indigenous seed mix in order to propagate the locally or regionally occurring flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/ prospecting operation, be corrected and the area be seeded with a vegetation seed mix to his or her specification.

F 3.4 PROCESSING AREAS AND WASTE PILES (DUMPS)

F 3.4.1 Establishing processing areas and waste piles

- Processing areas and waste piles shall not be established within 100 metres of the edge of any river channel or other water bodies.
- Processing areas should be established, as far as practicable, near the edge of excavations to allow the waste, gravel and coarse material to be processed therein.
- The areas chosen for this purpose shall be the minimum reasonably required and involve the least disturbance to vegetation.
- Prior to development of these areas, the topsoil shall be removed and stored as described in paragraph F 2.1 above.
- The location and dimensions of the areas are to be indicated on the layout plan and once established, the processing of ore containing precious stones shall be confined to these areas and no stockpiling or processing will be permitted on areas not correctly prepared.
- Tailings from the extraction process must be so treated and/or deposited that it will in no way prevent or delay the rehabilitation process.

F 3.4.2 Rehabilitation of processing areas

- Coarse natural material used for the construction of ramps must be removed and dumped into the excavations.
- On completion of mining/prospecting operations, the surface of the processing areas especially if compacted due to hauling and dumping operations, shall be scarified to a depth of at least 300mm and graded to an even surface condition and the previously stored topsoil will be returned to its original depth over the area.
- Prior to replacing the topsoil the material that was removed from the processing area will be replaced in the same order as it originally occurred.

- The area shall then be fertilised if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local, adapted indigenous seed mix.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.

F 3.5 FINAL REHABILITATION

- All infrastructure, equipment, plant, temporary housing and other items used during the mining period will be removed from the site (section 44 of the MPRDA)
- Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the mining area and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on the site.
- Final rehabilitation shall be completed within a period specified by the Regional Manager.

F 4 MONITORING AND REPORTING

F 4.1 INSPECTIONS AND MONITORING

- Regular monitoring of all the environmental management measures and components shall be carried out by the holder of the prospecting right, mining permit or reconnaissance permission in order to ensure that the provisions of this programme are adhered to.
- Ongoing and regular reporting of the progress of implementation of this programme will be done.
- Various points of compliance will be identified with regard to the various impacts that the operations will have on the environment.
- Inspections and monitoring shall be carried out on both the implementation of the programme and the impact on plant and animal life.
- Visual inspections on erosion and physical pollution shall be carried out on a regular basis.

Regulation 55 promulgated in terms of the MPRDA requires the following:

Monitoring and performance assessments of environmental management programme or plan

- (1) *As part of the general terms and conditions for a prospecting right, mining right or mining permit and in order to ensure compliance with the approved environmental management programme or plan and to assess the continued appropriateness and adequacy of the environmental management programme or plan, the holder of such right must-*
 - (a) *conduct monitoring on a continuous basis;*
 - (b) *conduct performance assessments of the environmental management programme or plan as required; and*
 - (c) *compile and submit a performance assessment report to the Minister to demonstrate adherence to sub-regulation (b).*
- (2) *The frequency of performance assessment reporting shall be-*
 - (a) *in accordance with the period specified in the approved environmental management programme or plan , or, if not so specified;*
 - (b) *as agreed to in writing by the Minister; or*
 - (c) *biennially (every two years).*
- (3) *The performance assessment report, shall be in the format provided in guidelines that will from time to time be published by the Department and shall as a minimum contain-*
 - (a) *information regarding the period that applies to the performance assessment;*
 - (b) *the scope of the assessment;*
 - (c) *the procedure used for the assessment;*

- (d) *the interpreted information gained from monitoring the approved environmental management programme or plan;*
 - (e) *the evaluation criteria used during the assessment;*
 - (f) *the results of the assessment; and*
 - (g) *recommendations on how and when deficiencies that are identified and/or aspects of non-compliance will be rectified.*
- (4) *The holder of a prospecting right, mining right or mining permit may appoint an independent qualified person(s) to conduct the performance assessment and compile the performance assessment report provided that no such appointment shall relieve the holder of the responsibilities in terms of these regulations.*
- (5) *Subject to section 30(2) of the Act, the performance assessment report submitted by the holder shall be made available by the Minister to any person on request.*
- (6) *If upon consideration by the Minister, the performance assessment executed by the holder is not satisfactory or the report submitted by the holder is found to be unacceptable, the holder must-*
- (a) *repeat the whole or relevant parts of the performance assessment and revise and resubmit the report; and/or*
 - (b) *submit relevant supporting information; and/or*
 - (c) *appoint an independent competent person(s) to conduct the whole or part of the performance assessment and to compile the report.*
- (7) *If a reasonable assessment indicates that the performance assessment cannot be executed satisfactorily by the holder or a competent person(s) appointed by the holder, the Minister may appoint an independent performance assessment person(s) to conduct such performance assessment. Such appointment and execution shall be for the cost of the holder.*
- (8) *When the holder of a prospecting right, mining right or mining permit intends closing such operation, a final performance assessment shall be conducted and a report submitted to the Minister to ensure that –*
- (a) *the requirements of the relevant legislation have been complied with;*
 - (b) *the closure objectives as described in the environmental management programme or plan have been met; and*
 - (c) *all residual environmental impacts resulting from the holder's operations have been identified and the risks of latent impacts which may occur have been identified, quantified and arrangements for the management thereof have been assessed.*
- (9) *The final performance assessment report shall either precede or accompany the application for a closure certificate in terms of the Act.*

F 4.2 COMPLIANCE REPORTING / SUBMISSION OF INFORMATION

- Layout plans will be updated on a regular basis and updated copies will be submitted on a biennial basis to the Regional Manager.
- Reports confirming compliance with various points identified in the environmental management programme will be submitted to the Regional Manager on a regular basis and as decided by the said manager.
- Any emergency or unforeseen impact will be reported as soon as possible.
- An assessment of environmental impacts that were not properly addressed or were unknown when the programme was compiled shall be carried out and added as a corrective action.

F 5 CLOSURE

When the holder of a prospecting right, mining permit or reconnaissance permission intends closing down his/her operations, an environmental risk report shall accompany the application for closure. The requirements

of such a risk report is contained in Regulation 60 of the Regulations promulgated in terms of the Act and is quoted below:

F 5.1 ENVIRONMENTAL RISK REPORT

- *“An application for a closure certificate must be accompanied by an environmental risk report which must include-*
 - (a) *the undertaking of a screening level environmental risk assessment where-*
 - (i) *All possible environmental risks are identified, including those which appear to be insignificant;*
 - (ii) *the process is based on the input from existing data;*
 - (iii) *the issues that are considered are qualitatively ranked as –*
 - (aa) *a potential significant risk; and/or*
 - (bb) *a uncertain risk; and/or*
 - (cc) *an insignificant risk.*
 - (b) *the undertaking of a second level risk assessment on issues classified as potential significant risks where-*
 - (i) *appropriate sampling, data collection and monitoring be carried out;*
 - (ii) *more realistic assumptions and actual measurements be made; and*
 - (iii) *a more quantitative risk assessment is undertaken, again classifying issues as posing a potential significant risk or insignificant risk.*
 - (c) *assessing whether issues classified as posing potential significant risks are acceptable without further mitigation;*
 - (d) *issues classified as uncertain risks be re-evaluated and re-classified as either posing potential significant risks or insignificant risks;*
 - (e) *documenting the status of insignificant risks and agree with interested and affected persons;*
 - (f) *identifying alternative risk prevention or management strategies for potential significant risks which have been identified, quantified and qualified in the second level risk assessment;*
 - (g) *agreeing on management measures to be implemented for the potential significant risks which must include-*
 - (i) *a description of the management measures to be applied;*
 - (ii) *a predicted long-term result of the applied management measures;*
 - (iii) *the residual and latent impact after successful implementation of the management measures;*
 - (iv) *time frames and schedule for the implementation of the management measures;*
 - (v) *responsibilities for implementation and long-term maintenance of the management measures;*
 - (vi) *financial provision for long-term maintenance; and*
 - (vii) *monitoring programmes to be implemented.”*

F 5.2 CLOSURE OBJECTIVES

Closure objectives form part of this EMP Plan and must-

- (a) identify the key objectives for mine closure to guide the project design, development and management of environmental objectives;
- (b) provide broad future land use objective(s) for the site; and
- (c) provide proposed closure cost.

F 5.3 CONTENTS OF CLOSURE PLAN

A closure plan forms part of the EMP and must include the following:

- (a) a description of the closure objectives and how these relate to the prospecting or mine operation and its environmental and social setting;
- (b) a plan contemplated in Regulation 2(2), coordinated according to generally accepted standards, showing the land or area under closure;

- (c) a summary of the regulatory requirements and conditions for closure negotiated and documented in the environmental management programme or plan;
- (d) a summary of the results of the environmental risk report and details of identified residual and latent impacts;
- (e) a summary of the results of progressive rehabilitation undertaken;
- (f) a description of the methods to decommission each prospecting or mining component and the mitigation or management strategy proposed to avoid, minimize and manage residual or latent impacts;
- (g) details of any long-term management and maintenance expected;
- (h) details of financial provision for monitoring, maintenance and post closure management, if required;
- (i) a plan or sketch at an appropriate scale describing the final land use proposal and arrangements for the site;
- (j) a record of interested and affected persons consulted; and
- (k) technical appendices, if any.

F 5.4 TRANSFER OF ENVIRONMENTAL LIABILITIES TO A COMPETENT PERSON

Should the holder of a prospecting right, mining permit or reconnaissance permission wish to transfer any environmental liabilities and responsibilities to another person or persons, the following will pertain:

- (1) An application to transfer environmental liabilities to a competent person in terms of section 48) of the Act, must be completed on Form O as set out in Annexure 1 to the Regulations and be lodged to the Minister for consideration.
- (2) The holder of a prospecting right, mining right or mining permit may transfer liabilities and responsibilities as identified in the environmental management plan and the required closure plan to a competent person as contemplated in Regulation 58.
- (3) When considering the transfer of environmental liabilities and responsibilities in terms of section 48) of the Act, the Minister must consult with any State department which administers any law relating to matters affecting the environment.
- (4) No transfer of environmental liabilities and responsibilities to a competent person may be made unless the Chief Inspector of Mines and the Department of Water Affairs and Forestry have confirmed in writing that the person to whom the liabilities and responsibilities is transferred to, have the necessary qualifications pertaining to health and safety and management of potential pollution of water resources.

F 5.5 Notes on Legal Provisions

NOTE: The holder of a prospecting right, mining permit or reconnaissance permission must also take cognisance of the provisions of other legislation dealing with matters relating to conservation, and which include, inter alia, the following:

- * National Monuments Act, 1969 (Act 28 of 1969).
- * National Parks Act, 1976 (Act 57 of 1976)
- * Environmental Conservation Act, 1989 (Act 73 of 1989)
- * National Environmental Management Act, 1998 (Act No. 107 of 1998)
- * Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965)
- * The National Water Act, 1998 (Act 36 of 1998)
- * Mine Safety and Health Act, 1996 (Act 29 of 1996)
- * The Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).

C5.2 Annexure II - Abstracts of the Mine Health and Safety Act No. 29 of 1996 and Amendment Act No. 72 of 1997

DEFINITIONS:

Section 102 of the Mine Health and Safety Act refers.

“mine” means, when –

- (a) used as a noun-
 - (i) any borehole, or excavation, in any tailing or in the earth, including the portion of the earth that is under the sea or other water, made for the purpose of searching for or winning a mineral, whether is being worked or not, or
 - (ii) any other place where a mineral deposit is being exploited, including the mining area and all buildings, structures, machinery, mine dumps, access roads or objects situated on or in that area that are used or intended to be used in connection with searching, winning, exploiting or processing of a mineral, or for health and safety purposes. But, if two or more excavations, boreholes or places are being worked in conjunction with one another
 - (iii) a works; and
- (b) used as a verb, the making of any excavation or borehole referred to in paragraph (a) (i), or the exploitation of any mineral deposit in any other manner, for the purpose of winning a mineral including prospecting in connection with the winning of a mineral.
 - a) whether that substance is in solid, liquid or gaseous form;
 - b) that occurs naturally in or on the earth, in or under water or in tailings, and
 - c) that has been formed by or subjected to a geological process.

“processing” means the recovering, extracting, concentrating, refining, calcimining, classifying, crushing, milling, screening, washing, reduction, smelting or gasification or any mineral, and “process” has a similar meaning

“works” means any place, excluding a mine, where any person carries out-

- a) The transmitting and distributing to another consumer of any form of power from a mine, by the owner thereof, to the terminal point of bulk, to the power supply meter on any such other consumer’s premises, or
- b) Training at any central rescue station, or
- c) The making, repairing, re-opening or closing of any subterranean tunnel, or
- d) Any operations necessary in connection with any of the operational listed in this paragraph.

EXAMPLE FOR USE BY CONTRACTOR WHEN APPOINTING SUB-ORDINATES IN TERMS OF THE MINE HEALTH AND SAFETY ACT (1996) AS AMENDED.

(To be printed on Contractors letter head)

APPOINTMENT IN TERMS OF SUB-ORDINATE MANAGER: REGULATION 2.6.1 IN FORCE IN TERMS OF SCHEDULE 4 OF THE MINE HEALTH AND SAFETY ACT (ACT NO. 29 OF 1996) AS AMENDED BY THE HEALTH SAFETY AMENDMENT ACT (ACT NO. 72 OF 1997)

I, in my capacity as Commercial Manager, having been appointed in terms of Section 3(1) of the Act (as amended), by the Deputy Director General who is our client, 'Aganang Local Municipality, Project Management Unit' and owner of the Mine(s) to be worked under the requirements of the above mentioned Acts hereby, in terms of Regulation 2.6.1 of the Act as amended, appoint as Sub-Ordinate Manager of the Contractor, of address, and contact number, on contract no for the

In accordance with the provisions of the Mine Health and Safety Act, 1996 (Act 29 of 1996), you are also appointed in terms of Section 7(2) of the Mine Health and Safety Act, 1996 to perform the following functions, assigned to the Mine Manager in terms of Section 7(1), 10(2) (b) and (c) and 11 (1) in so far as your area of responsibilities are concerned:-

1. You must identify the hazards, assess the risk and record the hazards to health and safety to which employees may be exposed while they are at work, and
2. To the extent that is reasonable, you must ensure that every employee is properly trained:
 - a. In the measures necessary to eliminate, control and minimise those risks to health and safety.
 - b. In the procedures to be followed to perform the employee's work.

3. To the extent that is reasonably practical, you must:-

Ensure that every employee becomes familiar with the work-related hazards and risk and the measures that must be taken to eliminate, control and minimise those hazards and risks.

4. To the extent that is reasonably practical, you must:-

Ensure that every employee under your control complies with the requirements of the Act. Institutes the measures necessary to secure, maintain and enhance health and safety. Considers and employees training and capabilities in respect of health and safety before assigning a task to that employee.

Ensure that work is performed under the general supervision of a person trained to understand the hazards associated with the work, and who has the authority to ensure that the precautionary measures laid down by the Manager are implemented.

You will be responsible for the control, management and direction of all the activities and employees connected with work and you are required to ensure that all such activities take place in accordance with the provisions of the Mine Health and Safety Act and the Regulations are complied with.

You are further required to inform the Manager, as soon as practicable, of any breach of any provision of these Regulation, to enable him to inform the Principal Inspector of Mines, Department of Minerals and Energy, or take such steps as may be necessary.

Please acquaint yourself with the relevant Regulations, Standards and Procedures, which have a bearing on your appointment. You must ensure that you are fully conversant with the requirements of the Procedures for Reporting Accidents.

SIGNED:

DATE:

WITNESS: 1. 2.

NAME (Print): 1. 2.

I,, having been appointed in terms of Regulation 2.6.1 of the act (as amended) to perform all functions entrusted to In terms of the Act (as amended) hereby accept the above appointment.

SIGNED:

DATE:

WITNESS: 1. 2.

NAME (Print): 1. 2.

**EXAMPLE FOR USE BY CONTRACTOR WHEN APPOINTING SUB-ORDINATES IN TERMS OF THE
MINE HEALTH AND SAFETY ACT (1996) AS AMENDED.**

(To be printed on Contractor's letter head)

APPOINTMENT OF RESPONSIBLE MINE SURVEYOR / COMPETANT PERSON: REGULATION 2.12.2 AND 2.12.6 IN FORCE IN TERMS OF SCHEDULE 4 OF THE MINE HEALTH AND SAFETY ACT, (ACT NO.29 OF 1996) AS AMENDED BY THE HEALTH AND SAFETY AMENDEMENT ACT (ACT NO. 72 OF 1997)

I, in my capacity as Commercial Manager, having been appointed in terms of Section 3(1) of the Act (as amended), by the Deputy Director General, who is our client, 'Aganang Local Municipality', Engineering Services Department and owner of the Mine(s) to be worked under the requirements of the above mentioned Acts hereby, in terms of Regulations 2.12.2 and 2.12.6 of the Act as amended, appoint

..... as Competent Person responsible for mine survey for the Contractor,

.....
of address

and contact number, on all contracts in the Limpopo that are undertaken by the contractor.

Please confirm this appointment by signing at the bottom.

SIGNED: DATE:

NAME:

SIGNED: DATE:

NAME:

**EXAMPLE FOR USE BY CONTRACTOR WHEN APPOINTING SUB-ORDINATES IN TERMS OF THE
MINE HEALTH AND SAFETY ACT (1996) AS AMENDED.**

(To be printed on Contractor's letter head)

**APPOINTMENT AS COMPETANT PERSON IN CHARGE OF MACHINERY IN TERMS OF REGULATION
2.13.2 IN FORCE IN TERMS OF SCHEDULE 4 OF THE MINE HEALTH AND SAFETY ACT (ACT NO. 29 OF
1996) AS AMENDED BY THE HEALTH AND SAFETY AMENDEMENT ACT (ACT NO. 72 OF 1997)**

I, in my capacity as Commercial Manager, having been appointed
in terms of Section 3(1) of the Act (as amended), by the Deputy Director General, who is our client, 'Aganang
Local Municipality', Engineering Service Department and owner of the Mine(s) to be worked under the
requirements of the above mentioned Acts hereby, in terms of Regulations 2.13.2 of the Act as amended,
appoint as Competent Person in charge of machinery for the
Contractor,

.....
of address

and contact number, on all contracts in the Limpopo that are undertaken by the
contractor.

You are to report any accident to the mine manager immediately and personally visit the scene of the accident
without delay.

You must familiarise yourself with the Mine Health and Safety Act and the Minerals Act and the Regulations and
ensure that you have a copy in your possession and you must take all reasonable measures to ensure that the
provisions of this Act are complied with.

Your attention is further drawn to Regulation 2.13.4.1 as well as the requirements of Chapter 18,20 and 21.
Please confirm this appointment by signing at the bottom.

SIGNED: DATE:

NAME:

SIGNED: DATE:

NAME:

1.

C5.3 Annexure III - Borrow Pit Guarantee

(Contractor to source all material from an offsite commercial source)

(BANK OR GUARANTOR'S LETTER HEAD)

(Reference number)

(Guarantee number)

The Regional Manager

The Department of Mineral Resources

Private Bag A1

KLERKSDORP

2570

Dear Sir/ Madam

**• FINANCIAL GUARANTEE FOR THE REHABILITATION OF LAND DISTURBED BY MINING
(EXECUTION OF ENVIRONMENTAL MANAGEMENT PROGRAMME)**

- 1 Concerning the responsibility in terms of the Mineral and Petroleum Resources Development Act 28 of 2002, which is incumbent on

..... (hereinafter referred to as "the mine owner")

to execute the environmental management programme approved in terms of the provisions of the said Act
for the mine known as

.....

situated in the magisterial district of Province

....., I/We, in my/our

Capacity/capacities of

and as duly authorized representative

.....

(Hereinafter referred to as "the guarantor") confirm that the amount of

R..... (.....)

is available to you for the purpose of executing the said environmental management programme.

- 2 The guarantor, who hereby waives the advantages of the exceptions non numerate peculiar non causa debit executions division is the meaning and the consequences of which is known to the guarantor undertakes to pay to you the said

sum of R..... (.....) upon receipt of a written claim from you to do so and the claim may be submitted by you, if (in your opinion and discretion) the mine owner fails or remains in default to execute the said environmental management programme, or if he ceases mining/prospecting operations, or if his estate is sequestered, or if he should hand over his estate in terms of the Insolvency act which are applicable in the Republic of South Africa, or if the guarantor gives written notice to you in terms of clause 5 of this agreement. The said claim may be instituted by you at any stage commencing from the date of signature of this guarantee.

- 3 The said amount of R..... may be held by you on the condition that you, after having complied with all the provisions of the said environmental management programme, will give account to the guarantor of how the amount was appropriated and repay any inappropriate amount to the guarantor.
- 4 This undertaking is neither negotiable nor transferable, and –
 - (a) must be returned to the guarantor when giving account to the guarantor in terms of clause 3 above,
 - (b) shall lapse on the granting of a closure certificate in terms of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and
 - (c) shall not be construed as placing any other responsibility on the guarantor other than the paying of the guaranteed amount.
- 5 The guarantor reserves the right to withdraw from this guarantee after having given you at least three months written notice in advance of his intention to do so.

Yours faithfully

.....

ADDRESS:

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.....

DATE:

- PLEASE NOTE:**
- (1) No amendments and/or additions to the wording of this Guarantee will be accepted.
 - (2) The address of the guarantee must be stated clearly.
 - (3) This guarantee must be returned to:

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