

# MPFUMELELO BUSINESS ENTERPRISE

QUOTATION NO: 150362/1

**APPOINTMENT OF SERVICE PROVIDER FOR THE CONSTRUCTION (3ML/D WTW  
& 6ML CLEAR WATER RESERVOIR AT LOSKOP REGIONAL BULK WATER  
SUPPLY SCHEME IN THEMBISILE HANI LOCAL MUNICIPALITY, WORK  
PACKAGE 1**

<b>Name of Entity</b>	
<b>Price (Excl. VAT)</b>	
<b>CIDB</b>	<b>4 CE OR HIGHER</b>

<b>Prepared &amp; Issued By:</b> Mpumelelo Business Enterprise 21 Norwin White River <b>Mpumalanga</b> 1240 Tel: 013-751-3301 Fax: 013-751-2498	<b>Enquiries:</b> <b>Pastor Thuli Mhlongo</b> Mpumelelo Business Enterprise 21 Norwin White River Mpumalanga 1240 Cell: 082-53330121
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SUBMISSION DETAILS

<b>TENDER BOX</b>	<ul style="list-style-type: none"><li>• <b>MPFUMELELO BUSINESS ENTERPRISE 2A WALTER SISULU STREET, GROUND FLOOR, MIDDELBURG(MPUMALANGA)</b></li><li>• <b>OR</b></li><li>• <b>WORK PACKAGE 1 SITE OFFICE</b></li></ul>
<b>CLOSING DATE AND TIME</b>	<b>Friday, 5<sup>th</sup> May 2023 @ 12H00</b>

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## **APPOINTMENT OF SERVICE PROVIDER FOR THE CONSTRUCTION (3ML/D WTW & 6ML CLEAR WATER RESERVOIR AT LOSKOP REGIONAL BULK WATER SUPPLY SCHEME IN THEMBISILE HANI LOCAL MUNICIPALITY, WORK PACKAGE 1**

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## APPOINTMENT OF SERVICE PROVIDER FOR THE CONSTRUCTION (3ML/D WTW & 6ML CLEAR WATER RESERVOIR AT LOSKOP REGIONAL BULK WATER SUPPLY SCHEME IN THEMBISILE HANI LOCAL MUNICIPALITY, WORK PACKAGE 1

MPFUMELELO BUSINESS ENTERPRISE hereby invites quotations from suitably qualified service providers for the APPOINTMENT OF SERVICE PROVIDER FOR **THE CONSTRUCTION (3ML/D WTW & 6ML CLEAR WATER RESERVOIR AT LOSKOP REGIONAL BULK WATER SUPPLY SCHEME IN THEMBISILE HANI LOCAL MUNICIPALITY, WORK PACKAGE 1.**

Quotations may only be submitted on the quotation document issued. Copies of the quotation document will be available at **Mpfumelelo Business Enterprise Site Office Building at reception and Nkangala District Municipality.**

Quotations, in a sealed envelope and clearly marked “***Quotation number and description of the project***”, must be submitted in the Tender Box at Mpfumelelo Business Enterprise site office or Nkangala District Municipality at 2A Walter Sisulu Street, Middelburg, Mpumalanga, not later than **12H00 on 5<sup>th</sup> May 2023.**

### GENERAL:

- Quotations shall remain valid for a period of **90** days from the closing; no, no late, faxed or e-mailed quotations will be accepted.

For enquiries, please contact **Pastor Thuli Mhlongo** at **082-53330121** during office hours, Monday to Friday, between 07H30-13H00 and 13H45-16H15.

Quotations will be evaluated in terms of the Supply Chain Management policy of the **Nkangala District Municipality**. The lowest quotation will not necessarily be accepted and the right to accept the whole or part of any quotation or not to consider any quotation not suitably endorsed is fully reserved by **Mpfumelelo Business Enterprise**.

<b>INSTRUCTIONS TO QUOTATIONS:</b>	
1.	Failure to complete all returnable schedules and signing thereof will result in an automatic disqualification.
2.	Proposals and any other supporting documents must be attached to the back of this quotation document.
3.	No quotation document will be considered unless submitted on Council's Official quotation Document.
4.	A quotation document submitted by a registered company may not be considered unless accompanied by a resolution of a Board of Directors of the Company authorizing the person to sign the quotation document on behalf of the Company.
5.	Quotations completed in ink shall be submitted in a sealed envelope, clearly marked with the relevant Project number and / or project description, to Tender Box.
6.	Quotations received after the closing date and time shall not be considered.
7.	The Council retains the right to call for any additional information that it may deem necessary.
8.	The Council will not be held responsible for any expenses incurred by the company in preparing and submitting the quotations.
9.	If quoting as a Joint Venture, the Joint Venture Agreement must be submitted with the quotation documents detailing the split of responsibilities in terms of the tender specifications, i.e. the percentage of work to be done by each partner.
10.	Check the quotation documents on receipt for completeness and notify the employer of any discrepancy or omission.
11.	Treat as confidential all matters arising in connection with the quotation. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a quotation offer in response to the invitation.
12.	Obtain, as necessary for submitting a quotation, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the quotation documents by reference
13.	Pricing the tender  State the rates and prices in South African currency (ZAR) Rand.
14.	Quotations communicated on paper shall be submitted as original.
15.	<b>Telephonic, telegraphic, telex, facsimile or e-mailed quotations will <u>not</u> be accepted.</b>
16.	Accept that quotations, 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
17.	The quotation validity period is <b>90</b> Days.

18	The company, quoting, 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.						
19	<p><b>The following is required to be submit with the quotation:</b></p> <p>(1) A valid Tax Clearance Certificate issued by the South African Revenue Services;</p> <p>(2) A copy of the Company / CC Registration. In case of Joint Venture –both companies / cc to submit registration documentation.</p> <p>(3) In case of Joint Venture – the Joint Venture Agreement.</p> <p>(4) Duly signed and dated of Authority of Signatory on company Letterhead.</p> <p>(5) Specific Goals in terms of the provisions of the Preferential procurement Regulations, 2022</p>						
20	<p><b>Eligibility</b></p> <p>Only those bidders who satisfy the following criteria are eligible to submit tenders:</p>						
21	<p><b>Evaluation of Quotations</b></p> <p>Notice is drawn to the fact that the awarding of this quotation will be in terms of the Supply Chain Management Policy of the Nkangala District Officer and prescribed evaluation criteria in terms of the Supply Chain Management Regulations, 2005</p>						
22	<b>Evaluation points</b>						
	<p>Preference points for this bid shall be awarded for:</p> <p>(a) Price; and</p> <p>(b) Specific Goals in terms of the Preferential Procurement Regulations 2022</p>						
	The maximum points for this quotation are allocated as follows:						
	<table border="1"> <tr> <td></td><td><b>POINTS</b></td></tr> <tr> <td><b>PRICE</b></td><td><b>80</b></td></tr> <tr> <td><b>SPECIFIC GOALS</b></td><td><b>20</b></td></tr> </table>		<b>POINTS</b>	<b>PRICE</b>	<b>80</b>	<b>SPECIFIC GOALS</b>	<b>20</b>
	<b>POINTS</b>						
<b>PRICE</b>	<b>80</b>						
<b>SPECIFIC GOALS</b>	<b>20</b>						

	<b>Total points for Price and Specific Goals must not exceed</b>	<b>100</b>	
23	The number of paper copies of the signed contract to be provided by the Employer is one.		
24	<p>The additional conditions of the quotation are:</p> <ol style="list-style-type: none"> <li>1 Mpfumelelo Business Enterprise may also request that the company quoting provide written evidence that his financial, labor and resources are adequate for carrying out the project.</li> <li>2 Mpfumelelo Business Enterprise reserves the right to appoint a firm of chartered accountants and auditors and / or execute any other financial investigations on the financial resources of any entity quoting. The entity quoting shall provide all reasonable assistance in such investigations.</li> <li>3 Mpfumelelo Business Enterprise reserves the right to appoint a different Contractor for each project. The entity quoting shall be required to complete the form of offer.</li> <li>4 That the issuing by the contractor of cessions is expressly prohibited except if and when prior written approval of the Mpfumelelo Business Enterprise under the signature of the Municipal Manager for the issue of a cession has been requested and obtained.</li> </ol>		

# MPFUMELELO BUSINESS ENTERPRISE

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## APPOINTMENT OF SERVICE PROVIDER FOR THE CONSTRUCTION (3ML/D WTW & 6ML CLEAR WATER RESERVOIR AT LOSKOP REGIONAL BULK WATER SUPPLY SCHEME IN THEMBISILE HANI LOCAL MUNICIPALITY, WORK PACKAGE 1

### T2.1 LIST OF RETURNABLE DOCUMENTS

The following returnable Schedules MUST be completed:

#### Returnable Schedules required for evaluation purposes

Form A	INVITATION TO BID
Form B	DECLARATION OF GOOD STANDING REGARDING TAX
Form C	DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES
Form D	AUTHORITY OF SIGNATORY
Form E	PREFERENCE SCHEDULE
Form F	DECLARATION OF INTEREST
Form G	FINANCIAL REFERENCES /BIDDER'S CREDIT RATING AND BANK DETAILS
Form H	CERTIFICATE OF INDEPENDENT BID DETERMINATION
Form I	DECLARATION OF MUNICIPAL ACCOUNT
Form J	SCHEDULE OF PREVIOUS EXPERIENCE
Form K	SCHEDULE OF CURRENT PROJECTS
Form L	SCHEDULE OF PROPOSED SUB- CONTRACTORS
Form M	DECLARATION OF TENDERER'S LITIGATION HISTORY

**PART A**  
**INVITATION TO BID**

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (MPFUMELELO BUSINESS ENTERPRISE)</b>			
BID NUMBER:	150362/1	CLOSING DATE:	26-April-2023
		CLOSING TIME:	12:00
DESCRIPTION	APPOINTMENT OF SERVICE PROVIDER FOR THE CONSTRUCTION (3ML/D WTW & 6ML CLEAR WATER RESERVOIR AT LOSKOP REGIONAL BULK WATER SUPPLY SCHEME IN THEMBSILE HANI LOCAL MUNICIPALITY, WORK PACKAGE 1		
<b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).</b>			

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

<b>SITE OFFICE MPFUMELELO BUSINESS ENTERPRISE/ OR NKANGALA DISTRICT MUNICIPALITY</b>

<b>SUPPLIER INFORMATION</b>			
NAME OF BIDDER			
POSTAL ADDRESS			
STREET ADDRESS			
TELEPHONE NUMBER	CODE	NUMBER	
CELLPHONE NUMBER			
FACSIMILE NUMBER	CODE	NUMBER	
E-MAIL ADDRESS			
VAT REGISTRATION NUMBER			
TAX COMPLIANCE STATUS	TCS PIN:	OR	CSD No:
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	<input type="checkbox"/> Yes  <input type="checkbox"/> No	B-BBEE STATUS LEVEL SWORN AFFIDAVIT	<input type="checkbox"/> Yes  <input type="checkbox"/> No

**[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]**

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3 ]
TOTAL NUMBER OF ITEMS OFFERED		TOTAL BID PRICE	R
SIGNATURE OF BIDDER	.....	DATE	
CAPACITY UNDER WHICH THIS BID IS SIGNED			

<b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:</b>		<b>TECHNICAL INFORMATION MAY BE DIRECTED TO:</b>	
DEPARTMENT	Supply Chain	CONTACT PERSON	Mr B.S Nkosi



CONTACT PERSON	Mr S.I Masilela	TELEPHONE NUMBER	013 249 2055
TELEPHONE NUMBER	013 249 2104	FACSIMILE NUMBER	
FACSIMILE NUMBER		E-MAIL ADDRESS	
E-MAIL ADDRESS			

## PART B

### TERMS AND CONDITIONS FOR BIDDING

<b>1. BID SUBMISSION:</b>
<p>1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.</p> <p>1.2. <b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR ONLINE</b></p> <p>1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.</p>
<b>2. TAX COMPLIANCE REQUIREMENTS</b>
<p>2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.</p> <p>2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.</p> <p>2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.</p> <p>2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.</p> <p>2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.</p> <p>2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.</p> <p>2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.</p>
<b>3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>
<p>3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?  <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?  <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?  <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?  <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?  <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p><b>IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.</b></p>

**NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID. NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.**

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....

DATE: .....

<b><u>ATTACH THE FOLLOWING DOCUMENTS HERETO</u></b>
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**1. For Closed Corporations**

- CK1 or CK2 as applicable (Founding Statement)
- Copy(s) of ID(s) of Director(s)

**2. For Companies**

- A copy of the Certificate of Incorporation
- Copy(s) of ID(s) of Director(s) and
- the shareholders register.

**3. For Joint Venture Agreements**

- Copy of the Joint Venture Agreement between all the parties,
- as well as the documents in (1) or (2) of each Joint Venture member.

**4. For Partnership**

- Copy(s) of ID(s) of Director(s) of the partners

**5. One person Business / Sole trader**

- Copy of ID

**6. Details of Tax Compliance Status from South African Revenue Service and Provide eSARS to access.**

**7. Duly Signed and dated original or copy of Authority of Signatory on company Letterhead**

8. **Specific Goals claim in terms of the Preferential Procurement Regulations 2022**

**FORM B: DECLARATION OF GOOD STANDING REGARDING TAX (MBD 2)**

**DETAILS OF TAX COMPLIANCE STATUS:**

TAXPAYER NAME	
TRADING NAME	
TAX REFERENCE NUMBER (S)	
VAT	
PIN	
EXPIRY DATE	

**TAX CLEARANCE CERTIFICATE REQUIREMENTS**

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

1. In order to meet this requirement bidders are required to apply for Tax Compliance Status (TCS) online or at any SARS branch office nationally. The Tax Compliance Status (TCS) requirements are also applicable to foreign bidders / individuals who wish to submit bids.
2. SARS will then furnish the bidder with a Tax Compliance Status (TCS) that will be valid for a period of 1 (one) year from the date of approval.
3. The Tax Compliance Status (TCS) must be submitted together with the bid. Failure to submit the Tax Compliance Status (TCS) will result in the invalidation of the bid.
4. In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Compliance Status (TCS).
5. Applications for the Tax Compliance Status (TCS) 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](http://www.sars.gov.za).



## FORM C: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
  - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
  - b. been convicted for fraud or corruption during the past five years;
  - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
  - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2005).
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	<p><b>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</b></p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audialterampartem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) and can be accessed by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p><b>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 2005)?</b></p> <p><b>The Register for Tender Defaulters can be accessed on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) by clicking on its link at the bottom of the home page.</b></p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	<b>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?</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

#### **CERTIFICATION**

**I, THE UNDERSIGNED (FULL NAME).....**

**CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM 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 D: AUTHORITY OF SIGNATORY**

Details of person responsible for tender process:

Name :	
Contact number :	
Office address :	

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

**PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:**

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

Mr .....  


has been duly authorized to sign all documents in connection with the Tender for Contract Number

.....and any Contract which may arise there from on

behalf of .....

(BLOCK CAPTIALS)

SIGNED ON BEHALF OF THE COMPANY .....

IN HIS CAPACITY AS .....

DATE .....

FULL NAMES OF SIGNATORY .....

AS WITNESSES: 1. ....

2. ....

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



## PRO-FORMA FOR JOINT VENTURES:

### Certificate of Authority for Joint Ventures

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

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
		Signature: ..... Name: ..... Designation: .....
		Signature: ..... Name: ..... Designation: .....
		Signature: ..... Name: ..... Designation: .....
		Signature: ..... Name: ..... Designation: .....

## FORM E: PREFERENCE SCHEDULE

MBD 6.1

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

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

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

#### 1. GENERAL CONDITIONS

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

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); **AND**

- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 System shall be applicable.

1.3 Preference points for this bid shall be awarded for:

(c) Price; and

(d) Specific goals in terms of the Preferential Procurement Regulations 2022

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

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and Specific Goals	100

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

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

#### 2. DEFINITIONS

2.1 **“black people”** is a generic term which means Africans, Coloureds and Indians;

- 2.2 **“broad-based black economic empowerment”** means the economic empowerment of all black people including women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated socio-economic strategies that include. but are not limited to:
- increasing the number of black people that manage, own and control enterprises and productive assets; facilitating ownership and management of enterprises and productive assets by communities, workers, cooperatives and other collective enterprises;
  - human resource and skills development;
  - achieving equitable representation in all occupational categories and levels in the workforce;
  - preferential procurement; and
  - investment in enterprises that are owned or managed by black people;
- 2.3 **“Designated group”** means Black designated groups; Black people; Women; People with disabilities; or Small enterprises, as defined in section 1 of the National Small Enterprise Act, 1996 (Act No. 102 of 1996);
- 2.4 **“Disability”** means, in respect of a person, a permanent impairment of a physical, intellectual, or sensory function, which results in restricted, or lack of, ability to perform an activity in the manner, or within the range, considered normal for a human being.
- 2.5 **“Historically Disadvantaged Individual (HDI)”** means a South African citizen:
- who, due to the apartheid policy that had been in place, had no franchise in national elections prior to the introduction of the Constitution of the Republic of South Africa Act 110 of 1983 or the Constitution of the Republic of South Africa Act 200 of 1993 (“the Interim Constitution”); and / or
  - who is a female; and / or
  - who has a disability;
- Provided that a person who obtained South Africa citizenship on or after the coming into effect of the Interim Constitution is deemed not to be an HDI.
- 2.6 **“Locality”** means a business enterprise located within the boundaries of MPFUMELELO BUSINESS ENTERPRISE to score points for locality.
- 2.7 **“Reconstruction and development Programme as published in Government Gazette No. 16085 dated 23 November 1994”** means in terms of Section 2(1) of the PPPFA of 2000 an organ of state must implement the programmes of the RDP and provide for points to be awarded for specific goals. In particular, some of the RDP goals that need to be considered in developing the Preferential Procurement policies include:
- Previously Disadvantaged Individuals;
  - Women;
  - Disabled Persons;
  - Youth; and
  - Local Labour.

- 2.8 **“specific goals”** means specific goals as contemplated in section 2(1)(d) of the Act which may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender and disability including the implementation of programmes of the Reconstruction and development Programme as published in Government Gazette No. 16085 dated 23 November 1994;
- 2.9 **“Targeted Enterprises”** means those enterprises (suppliers, manufacturers, service providers or construction works contractors) that own, operate or maintain premises within the target area defined in the contract, for the purposes of carrying out their normal business operations.
- 2.10 **“Targeted Labour”** means those individuals employed by a contractor, or sub-contractor, in the performance of a contract, who are defined in the contract as the target group, and who permanently reside in the defined target area.
- 2.11 **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- 2.12 **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- 2.13 **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- 2.14 **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- 2.15 **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000)
- 2.16 **“Women equity”** means an organisation or company which has at least twenty five percent of women ownership.
- 2.17 **“Youth”** means persons between the ages of 14 and 35.

### 3. **FORMULAE FOR PROCUREMENT**

#### 3.1 **POINTS AWARDED FOR PRICE**

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

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

**80/20**

**or**

**90/10**

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

Where

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

$P_t$  = Comparative price of bid under consideration

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

#### 4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the bid. For the purposes of this bid, the bidder will be allocated points based on the goals stated in table below as may be supported by proof/ documentation stated in the conditions of this bid:

The specific goals allocated points in terms of this tender	Number of points Allocated (80/20 system) (To be completed by the organ of state)		Number of points claimed (80/20 system) (To be completed by the tenderer)
HDI	30%	6	
Gender	30%	6	
Disability	30%	6	
Local Labour	5%	1	
Youth	5%	1	

#### 4.2 SPECIFIC GOALS CLAIM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022:

##### 4.2.1 NOTE 1 – HDI IN TERMS OF PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT NO. OF 2000, CLAUSE 2.1(d)

It must be noted that a total points of **30%** are obtainable in relation to the requirements as mentioned on the table above. Proof of in the form of **Ownership Information** contained in the **Central Supplier Database (CSD)** full report. Failure to submit evidential supporting documents (**refer to Note: 1**) is not an eliminating factor BUT a zero point will be scored.

Category	Specific goals points
51% - 100% HDI owned companies	30%
10% - 50% HDI owned companies	15%
0% - 10% HDI owned companies	0%

**NOTE 2 - GENDER IN TERMS OF PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT NO. OF 2000, CLAUSE 2.1(d)**

It must be noted that a total points of **30%** are obtainable in relation to the requirements as mentioned on the table above. Proof of in the form of **Ownership Information** contained in the **Central Supplier Database (CSD)** full report. Failure to submit evidential supporting documents (refer to Note: 2) is not an eliminating factor BUT a zero point will be scored.

Category	Specific goals points
51% - 100% women owned companies	30%
10% - 50% women owned companies	15%
0% - 10% women owned companies	0%

**NOTE 3 – PEOPLE LIVING WITH DISABILITIES IN TERMS OF PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT NO. OF 2000, CLAUSE 2.1(d)**

It must be noted that a total points of **30%** are obtainable in relation to the requirements as mentioned on the table above. Proof of in the form of **Ownership Information** contained in the **Central Supplier Database (CSD)** full report. Failure to submit evidential supporting documents (refer to Note: 3) is not an eliminating factor BUT a zero point will be scored.

Category	Specific goals points
51% - 100% companies owned by people living with disabilities	30%
10% - 50% companies owned by people living with disabilities	15%
0% - 10% companies owned by people living with disabilities	0%

**NOTE 4 – YOUTH IN TERMS OF RECONSTRUCTION AND DEVELOPMENT PROGRAMME (RDP)**

It must be noted that a total points of **5%** are obtainable in relation to the requirements as mentioned on the table above. Proof of in the form of **Ownership Information** contained in the **Central Supplier Database (CSD)** full report. Failure to submit evidential supporting documents (refer to Note: 4) is not an eliminating factor BUT a zero point will be scored.

Category	Specific goals points
51% - 100% youth owned companies	5%
10% - 50% youth owned companies	2.5%
0% - 10% youth owned companies	0%

**NOTE 5 – COMPANIES RESIDING WITHIN NDM IN TERMS OF RECONSTRUCTION AND DEVELOPMENT PROGRAMME (RDP)**

It must be noted that a total points of **5%** are obtainable in relation to the requirements as mentioned on the table above. Proof of in the form of **Ownership Information** contained in the **Central Supplier Database (CSD)** full report. Failure to submit evidential supporting documents (**refer to Note: 5**) is not an eliminating factor BUT a zero point will be scored.

Category	Specific goals points
----------	-----------------------

Companies residing within NDM	<b>5%</b>
Companies residing within the province	<b>2.5%</b>
Companies outside the province	<b>0%</b>

**DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3 Name of firm:.....

4.4 VAT registration number.....

4.5 Company registration number:.....

4.6 **TYPE OF FIRM** ( Tick Applicable Box)

- ☐ Partnership/ Joint Venture/ Consortium  
☐ One Person business/ sole propriety  
☐ Close Corporation  
☐ Company  
☐ (Pty) Ltd  
☐ Other : Specify \_\_\_\_\_

4.7 I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the bid, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- 4.8
- The information furnished is true and correct;
  - The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
  - In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
  - If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have:
    - a) disqualify the person from the tendering process;
    - b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
    - c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

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

**WITNESSES:**

1. ....

1. ....

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

DATE:

ADDRESS:

.....

.....

.....

.....

.....



**FORM F: DECLARATION OF INTEREST**

**MBD 4**

1. No bid will be accepted from persons in the service of the state<sup>1</sup>.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
- 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, shareholder<sup>2</sup>):.....

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.....

.....

<sup>1</sup>MSCM Regulations: "in the service of the state" means to be –

- (a) a member of –
  - (i) any municipal council;
  - (ii) any provincial legislature; or
  - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);

- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

<sup>2</sup> 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, principal 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

#### DECLARATION

I, the undersigned (name): ..... certify that the information furnished is correct. I accept that the state may act against me in terms of paragraph 23 of the General Conditions of Contract should this declaration prove to be false.

.....  
 Signature

.....  
 Date

.....  
 Capacity

.....  
 Name of Bidder

**FORM G: FINANCIAL REFERENCES****DETAILS OF TENDERERS BANKING INFORMATION****Notes to tenderer:**

1. The tenderer shall attach to this form an original or a copy of a letter from the bank not older than three (3) months confirming the bank account and details. Failure to provide the required letter with the tender submission shall render the tenderer's offer unresponsive.
2. The tenderer's banking details as they appear below shall be completed.
3. 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.

<b>BANK NAME:</b>									
<b>ACCOUNT NAME:</b> (e.g. ABC Civil Construction cc)									
<b>ACCOUNT TYPE:</b> (e.g. Savings, Cheque etc)									
<b>ACCOUNT NO:</b>									
<b>ADDRESS OF BANK:</b>									
<b>CONTACT PERSON:</b>									
<b>TEL. NO. OF BANK / CONTACT:</b>									
How long has this account been in existence:	<table border="1"><tr><td>0-6 months</td><td></td></tr><tr><td>7-12 months</td><td></td></tr><tr><td>13-24 months</td><td></td></tr><tr><td>More than 24 months</td><td></td></tr></table> (Tick which is appropriate)	0-6 months		7-12 months		13-24 months		More than 24 months	
0-6 months									
7-12 months									
13-24 months									
More than 24 months									

Name of Tenderer: .....

Date: .....

Signature: .....

Full name of signatory: .....

**ATTACH HERETO A STAMPED COPY OF A LETTER FROM BANK TO  
THIS PAGE NOT OLDER THAN THREE (3) MONTHS**

## FORM H: CERTIFICATE OF INDEPENDENT BID DETERMINATION

- . This Municipal Bidding Document (MBD) must form part of all bids<sup>1</sup> invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).<sup>2</sup> Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
- a. take all reasonable steps to prevent such abuse;
  - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
  - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

<sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

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

**CERTIFICATE OF INDEPENDENT BID DETERMINATION**

I, the undersigned, in submitting the accompanying bid:

---

(Bid Number and Description)

in response to the invitation for the bid made by:

---

(Name of Municipality / Municipal Entity)

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

I certify, on behalf

of: \_\_\_\_\_ that:

(Name of Bidder)

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

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium<sup>3</sup> will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - (a) prices;
  - (b) geographical area where product or service will be rendered (market allocation)
  - (c) methods, factors or formulas used to calculate prices;
  - (d) the intention or decision to submit or not to submit, a bid;
  - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
  - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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



10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2005 or any other applicable legislation.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

**FORM I: MUNICIPAL UTILITY ACCOUNT**

**DECLARATION BY THE TENDERER**

I the undersigned \_\_\_\_\_, has been duly

authorized to sign all documents with the Tender for Contract Number \_\_\_\_\_ on behalf of

\_\_\_\_\_ hereby make a declaration as follows:  
(referred to herein as "the Bidder")

1. I declare that the bidder and /or any of its director(s) / member(s) does not owe the municipality, or any other municipality and/or municipal entity any amount which is in arrears in respect of any municipal rates and taxes or municipal service charges.
2. I understand and accept that in the event that this declaration is proved to be false, the bid shall be rejected forthwith. All other rights of the municipality (including but not limited to the right to claim damages where applicable) shall remain reserved in full.

SIGNED ON BEHALF OF THE COMPANY

\_\_\_\_\_

IN HIS CAPACITY AS

\_\_\_\_\_

DATE

\_\_\_\_\_

FULL NAMES OF SIGNATORY

\_\_\_\_\_

UTILITY ACCOUNT NUMBER	NAME OF MUNICIPALITY	NAME OF OWNER

**ATTACH AN ORIGINAL OR A COPY OF A MUNICIPAL UTILITY  
ACCOUNT (NOT OLDER THAN THREE (3) MONTHS)**

**Important: Note the following**

- List and attach Account(s) registered all in the name(s) of the Director(s) or the Company on the declaration form attached hereto; or
- Attach a copy Lease Agreement along with the utility account of the Landlord, whereby the company is leasing the property its operating from.

## FORM J: SCHEDULE OF PREVIOUS EXPERIENCE

The procedure for the evaluation of responsive Bids will be on the average of the **previous projects** where the firm was involved. Reference of clients **MUST** be provided.

Evaluation of the Quotation's position in terms of his previous experience. Emphasis will be placed on the following:

- Experience of contracts of similar size
- At least three of the references will be contacted to obtain their input.

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

Description	Value (R) VAT excluded	Period work executed		Reference		
		Appointment Date	Completion Date	Name	Organisation	Tel no

## FORM K: SCHEDULE OF CURRENT PROJECTS

Provide the following information on current projects

**This information is material to the award of the Contract.**

Description	Value (R) VAT excluded	Appointment Date	Expected Completion Date	Reference		
				Name	Organisation	Tel no

---

**FORM L: SCHEDULE OF PROPOSED SUB-CONSULTANT**

Are / Do you have sub-contractors?

YES

NO

If yes, complete the below

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

**FORM M: DECLARATION OF TENDERER'S LITIGATION HISTORY**

Does the tenderer have any litigation with which tenderer (including its directors, shareholders or other senior members in previous companies) have been involved with any organ of state or state department within the last ten years?

YES	NO
-----	----

If yes, furnish your details in table below.

**NB: It is compulsory for all bidders to sign this form**

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, 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

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

C.1.1FORM OF OFFER

SUBCONTRACT FORM OF OFFER AND ACCEPTANCE

(Agreement)

---

**Offer**

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

.....

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

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Subcontract Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Subcontractor under the Subcontract 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 Subcontract identified in the Subcontract 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 Contractor by signing the Acceptance part of this Subcontract 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 Subcontractor in the Conditions of Subcontract identified in the Subcontract Data.

**For the Tenderer:**

.....

**Signature**

.....

**Name**

.....

**Capacity**



**Name and address of organisation:** \_\_\_\_\_

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

**Signature and name of witness:**

.....  
**Signature**  
.....  
**Name**  
.....  
**Date**

**Acceptance**

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

The terms of the contract, are contained in:

- Part 1      Agreements and Subcontract Data, (which includes this Agreement)
- Part 2      Subcontract Pricing Data
- Part 3      Subcontract Scope of Work
- Part 4      Subcontract Site Information

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

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

The Tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Contractor’s agent (whose details are given in the Subcontract 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 Subcontract identified in the Subcontract Data at, or just after,

the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

**For the Contractor:**

.....  
**Signature**

.....  
**Name**

.....  
**Capacity**

**Name and address of organisation:**

.....

.....

**Signature and name of witness:**

.....  
**Signature**

.....  
**Name**

.....  
**Date**

**Schedule of Deviations**

Notes:

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

4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Subcontract.

1. **Subject** .....

**Details** .....

2. **Subject** .....

**Details** .....

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

**For the Tenderer:**

.....

Signature

.....

Name

Name and address of organisation:

.....

.....

.....

Witness Signature

.....

Witness Name

.....

Date

**For the Contractor:**

.....

.....

Name and address of organisation:

.....

.....

.....

.....

.....

---

## CONFIRMATION OF RECEIPT

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

the ..... (day)  
of ..... (month)  
20 ..... (year)  
at ..... (place)

**For the Subcontractor:**

.....  
**Signature**

.....  
**Name**

.....  
**Capacity**

**Signature and name of witness:**

.....  
**Signature**

.....  
**Name**

## CONTRACT DATA

### GENERAL CONDITION OF SUBCONTRACT FOR CONSTRUCTION WORKS, FIRST EDITION (2018) CONDITIONS OF CONTRACT

The General conditions of subcontract for construction works, first edition (2018) published by the South African Institute of Civil Engineering, Private Bag X200, Halfway House, 1685 is applicable to this Contract and is obtainable from [www.saice.org.za](http://www.saice.org.za).

### CONTRACT SPECIFICATION DATA

The following contract specification data, referring to the General conditions of subcontract for construction works, first edition (2018) are applicable to this contract:

Part 1: Data Clause	Provided by the Employer Data
1.1.1.5	The "commencement date" means the date that the Agreement, made in terms of the Form of Offer and Acceptance, comes into effect.
1.1.1.13	The Subcontract Defects Liability Period for the Works shall be 365 days.
1.1.1.14	The time for achieving Subcontract Practical Completion is 11 calendar month which shall include 10 days of mobilization.
1.1.1.36	The Name of the main contractor is <b>Mpfumelelo Business Enterprise</b> The MBE Construction Manager is <b>Mr. Albert Oberholster</b>
1.2.1.2	The main contractor address for receipt of communication is:  <b>Work Package 1 Site Office</b> <b>LOSKOP</b> <b>MIDDELBURG P</b> <b>O Box 437</b> <b>Middelburg</b> <b>1050</b> <b>Telephone: 013 751 3381</b> <b>Email: admin@mpfumelelo.co.za</b>
1.1.1.16	The Employer's Agent is <b>Mpfumelelo Business Enterprise</b> , represented by <b>Mr Albert Oberholster</b>
1.2.1.2	The Employer's Agent's address for receipt of communication is: <b>21 Norwin White River PO Box 8125</b> <b>White River</b> <b>1240</b>
	<b>PO Box 8125</b> <b>White River</b> <b>1240</b> <b>Telephone: 013 755 1190</b> <b>Email: admin@mpfumelelo.co.za</b>

1.2.1	<p>Add the following to the clause:</p> <p>1.2.1.3 Sent by e-mail, irrespective of it being during office hours or otherwise.</p> <p>1.2.1.4 Delivered by a courier service and signed for by the recipient or his representative.</p>
1.1.1.26	The Subcontract pricing strategy is Re-measurement Contract.
1.3.5	<p>Add the following new Clause:</p> <p>The copyright in all documents, drawings and records (prepared by the Employer's Agent) related in any manner to the Works shall vest in the Employer, or the Employer's Agent or both (according to the dictates of the Contract that have been entered into by the Employer's Agent and the Employer for the Works), and the Contractor shall not furnish any information in connection with the Works to any person or organisation without the prior approval of the Employer to this effect.</p>
5.3.1	<p>The documentation required before commencement with Subcontract Works execution are:</p> <p>Subcontract Health and Safety Plan (Refer to Clause 4.3)</p> <p>Subcontract Initial Programme (Refer to Clause 5.6)</p> <p>Subcontract Security (Refer to Clause 6.2)</p> <p>Subcontract Insurance (Refer to Clause 8.6)</p>
5.3.2	<p>The time to submit the documentation required before commencement with Subcontract Works execution is 14 days.</p>
5.13.1	<p>The penalty for failing to complete the Subcontract Works is R 1 000 Monetary value per day.</p>

5.14.1	The requirements for achieving Subcontract Practical Completion is to complete all civil work as per the construction drawings.
6.8.2	Contract Price Adjustment will not be applicable for this contract.
6.10.3	The percentage retention is 5%. The Limit of Retention Money is 5% of the Contract Price at the time of the Agreement made in terms of the Form of Offer and Acceptance coming into effect

## PRICING INSTRUCTION

1. All activities must be invoiced on a monthly basis, based on the completion of the activity but not exceeding the allocated budget that has been priced for that activity.
2. Payment will be based on the completion of activities provided that reasonable progress towards the completion of the activity within the estimated budget is demonstrated.
3. The total price for the activities shall not be exceeded without the prior written approval and agreement of the Client.
4. The Schedule of Activities and the Bills of Quantities comprises items covering the service provider's profit and costs of general liabilities and includes costs of all services.
5. All rates and amounts must be completed by hand in black ink.
6. The schedule items cover the service provider's profit or general liabilities and the construction of temporary and permanent risks.
7. Although the tenderer is at liberty to insert a rate at his own choice for each item in the schedule, his attention is drawn to the fact that the employer has the right, under various circumstances, to payment for additional work carried out and that the Employer's Agent is obliged to base his assessment and the payment to be paid for such additional work on the rates inserted in the schedule by the tenderer.
8. The prices and rates to be inserted in the schedule of quantities are to be the full inclusive prices to the employer for the work described under several items. The prices shall be exclusive of Value Added Tax (VAT). Such prices shall cover all costs and expenses that may be required in and for the work described and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the document on which the tender is based.
9. In the event of the tenderer failing to price any item, it will be construed that the tenderer has made adequate allowance under other items for all labour, material and costs required for the exclusion, not only for the quantum of work covered by the unpriced item but also for any increase in the said quantum which may have to be undertaken during the course of the contract.
10. For the purposes of this Schedule of Activities and Bills of Quantities, the following words shall have the meanings hereby assigned to them:
  - Unit: The unit of measurement for each item of Service provided as defined in the Standardized Project or Particular Specifications.
  - Quantity (Qty): The number of units of work/service provision for each item.
  - Rate: The payment per unit of work/provision of services at which the Tenderer Tenders to do the work.
  - Amount: The quantity of an item multiplied by the Tendered rate of the (same) item.
  - Sum: An amount Tendered for an item, the extent of which is described in the schedule of activities, the scope of works or elsewhere, but of which the quantity of work is not measured in units.



# BILL OF QUANTITIES

SCHEDULE 6 : MOUTSE WATER SCHEME (3ML/D WTW & 6ML CLEAR WATER RESERVOIR)						
ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
6	SABS 1200G	<b>CONCRETE WORK</b>				
		<u>Concrete</u>				
	8.4.2	Blinding layer in class 15MPa/19mm to a minimum thickness of 50mm underneath structures				
6,1		i) Reservoir	m²	1257		
	PSG 6.4	No fines concrete (NF19) to a minimum thickness of 80mm underneath structures, complete with mortar seal				
6,2		i) Reservoir	m²	1257		
	8.4.3	<u>Strength concrete - class 35MPa/19mm</u>				
6,3		i) Reservoir floor slabs and footings	m³	380		
6,4		ii) Reservoir walls	m³	290		
6,5		iii) Reservoir roof slabs and columns	m³	265		
6,6		iv) Valve chamber floor slabs and footings	m³	6		
	8.4.3	<u>Strength concrete - Class 25 MPa/19mm</u>				
6,7		i) Reservoir apron slab	m³	40		
6,8		iii) Valve chamber walls	m³	30		
	8.4.3	<u>Strength concrete - class 15MPa/10mm Mass concrete to:</u>				
6,9		i) All structures (provisional)	m³	5		
	8.4.3	<u>Screed to:</u>				
6,10		i) All structures	m³	100		
	SABS 1200G	<b>CONCRETE- Formwork</b>				
	8.2.2	<u>Formwork - Smooth:</u>				
		<b>b) Horizontal plane - elevated to walkways and slabs</b>				
6,11		i) Reservoir	m²	1060		
	8.2.5	<b>d) Narrow widths (up to 300mm wide) to:</b>				
6,12		i) Reservoir	m	80		
	8.2.2	<b>e) Vertical plane (curved)</b>				
6,13		i) Reservoir walls & footings(curved)	m²	1615		
6,14		ii) 300 mm diam. columns (reservoir)	m²	360		
	8.2.5	<b>e) Narrow widths (up to 300mm wide) curved to:</b>				
6,15		i) Reservoir	m	130		
	8.2.6	<u>Box-out holes for pipes</u>				
		<u>Box-out holes, rectangular through concrete 200 to 500 mm thick: for pipework supplied and installed by the Mechanical Contractor:</u>				
		<u>Reservoir: 6Ml</u>				
6,16		a) 340 x 340mm box-out for 200mm flanged steel pipe	no	2		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6,17		b) 530 x 530mm box-out for 300mm flanged steel pipe	no	1		
		<b>REINFORCEMENT</b>				
	8.3.1	Reinforcement, high tensile steel				
6,18		i) Reservoir	t	110		
	8.3.1	Reinforcement, mild steel				
6,19		i) Reservoir	t	11		
	8.3.2	High tensile welded mesh - Ref No 395 (Provisional)				
6,20		i) Reservoir	m²	12		
	8.4.4	<u>Unformed surface finish</u>				
	a) Wood floated finish					
6,21		i) Reservoir	m²	1060		
	b) Steel floated finish					
6,22		i) Reservoir	m²	1060		
		<u>Grouting / casting in of pipes and specials</u>				
	a) Grouting/casting in of pipe pieces in the following pipe diameters (Refer also PSG2.6.4)					
PSG6.2						

6,23	SABS 1200G PSG6.3  PSG6.1  8,5        PSG 6.5	Reservoir: 6MJ	no	2		
6,24		a) 340 x 340mm box-out for 200mm flanged steel pipe	no	1		
		b) 530 x 530mm box-out for 300mm flanged steel pipe				
6,25		<b>MISCELLANEOUS</b> <b>Watertight testing of structures</b> i) Reservoir	no	1		
6,26		<b>Subsoil drain (provisional)</b> Subsoil drainage as detailed on drawing i) Reservoir	m	270		
6,27		<b>Joints</b> Reservoir: Joint type A1 as detailed	m	300		
6,28		Joint type B1 as detailed	m	145		
6,29		Roof joint incl. silicone bearing	m	145		
		<b>Items cast into concrete</b> Supply and install the following sleeves (including draw wires) to be cast into concrete				
6,30		i) 110 dia. uPVC telemetry pipe at Reservoir (5950mm long)	no	1		
6,31		ii) 40mm dia. HDPE sleeve in Reservoir roof (500mm long)	no	4		
6,32		iii) 40mm dia. HDPE sleeve in Reservoir wall (5500mm long)	no	4		
TOTAL CARRIED FORWARD						

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6,33	PSG 6.7	Supply and install the following outlet pipes to be cast into concrete: iv) 50mm diameter uPVC pipe 350mm long for roof drainage	no	50		
6,34		<u>Disinfection of reservoir</u> i) Disinfection and cleaning of reservoir	no	1		
6,35	PSG 6.6	<u>19mm stone on reservoir roof</u> Supply and install 19mm stone on top of reservoir roof: i) Reservoir	m³	250		
6,36	PSG 6.8	<u>Step irons</u> i) Step irons (Calcamite or similar approved)	no	19		
6,37		<u>3M/D WTW</u> a) Supply, Deliver, Install and Commission of a fully automated 3M/d water treatment package plant.including operator facility with sanitation infustructure ( Septic tank and French Drain) addendum	prov sum	1		
	PSL4.1	<u>6ML Raw Water Reservoir</u> <u>Clear water Reservoir (6ML): Inlet Pipework (dwg - N/3110/M/8/001)</u>				
6,40		a) <del>Pipe</del> item number 6.1 : 300mm Ø 90° SS Grade 304 Bend Flanged one end and other end blank	no	1		
6,41		b) <del>Pipe</del> item number 6.2 : 300mm Ø Flanged SS Grade 3.4 pipe with position of puddle flange as indicated. 1213mm	no	1		
6,42		c) Pipe item number 6.3 : 300mm Ø 90° Flanged MS Bend Flanged MS pipe	no	2		
6,43		d) Pipe item number 6.4 : 300mm Ø Flanged MS pipe 2675mm	no	2		
6,44		e) Pipe item number 6.5 : 300mm Ø to 250mm Flanged MS Reducer	no	2		

ITEM NO.	REF	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6,45		f) Pipe item number 6.6 : 250mm Ø MS pipe piece flanged one end & other end suitable for flexible coupling	no	1		
6,46		g) Pipe item number 6.7 : 250mm Ø Flexible coupling	no	1		
6,47		h) Pipe item number 6.8 : 250mm Ø MS pipe piece, flanged one end. 906mm	no	1		
6,48		i) Pipe item number 6.9 : 250mm Ø Flange adaptor	no	1		
6,49		j) Pipe item number 6.10: 300mm Ø Flanged MS Pipe. 1422mm	no	1		
6,50		k) Pipe item number 6.11 : 300mm Ø Flexible Coupling	no	1		

6,51		l) Pipe item number 6.12 : 300mm Ø MS Pipe Flanged one end with other end suitable for flexible coupling. 264mm	no	1			
6,52		m) Pipe item number 6.13 : 250mm Ø Flanged MS pipe flanged one end & other end suitable for flexible coupling 1387mm	no	1			
6,53		n) Pipe item number 6.14 : 250mm Water Meter	no	1			
6,54		o) Pipe item number 6.15 : 250mm Ø Flanged MS Pipe Piece. 762mm	no	1			
6,55		p) Pipe item number 6.16 : 250mm Ø Flange RSV Gate Valve	no	1			
	PSL4.1	<b><u>Clear Water Reservoir: Scour Pipework (dwg - N/3110/M/8/002)</u></b>					
6,56		a) Pipe item number 7.1 : 200mm Ø 90° SS Grade 304 Pipe both ends suitable for flexible coupling with puddle flange as indicated. 2430mm	no	1			
6,57		b) Pipe item number 7.2 : 300mm Ø Flexible Coupling	no	1			
6,58		c) Pipe item number 7.3 : 300mm Ø 90° pipe piece, flanged one end & other end suitable for flange adaptor. 855mm	no	1			
6,59		d) Pipe item number 7.4 : 300mm Ø Flanged RSV valve	no	1			
6,60		e) Pipe item number 7.5 : 300mm Ø Flanged MS Equal Tee	no	2			
6,61		f) Pipe item number 7.6 : 300mm Ø Flange Adaptor	no	3			
	PSL4.1	<b><u>Clear Water Reservoir: overflow Pipework (dwg - N/3110/M/8/002)</u></b>					
6,62		a) Pipe item number 8.1 : 300mm to 200mm Ø Flanged SS grade 304 Bellmouth. 1400mm	no	1			
6,63		b) Pipe item number 8.2 : 300mm Ø 90° Flanged SS Grade 3.4 Bend	no	1			
TOTAL CARRIED FORWARD							

**NB: TOTAL AMOUNT TO BE FORWARDED TO FORM C 1.1 (FORM OF OFFER)**

## SCOPE OF WORK

### PSC

### SITE CLEARING (SABS 1200 C)

#### PSC 1 GENERAL

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.

#### PSC 2 DUMPING SITE

No dumping is allowed on site other than at the designated and approved fill areas. Dumping will only be allowed for filling sinkholes and dolines and may not be detrimental to the natural storm water drainage of the area. Only soil, rock, clean masonry and concrete rubble may be dumped in the designated dump areas.

#### PSC 3 REMOVAL OF TREES

No trees may be removed without written permission from the Engineer.

#### PSC 4 MEASUREMENT AND PAYMENT

##### PSC 4.1 Item:

Clear & Grub (Clause 8.2.1)

Unit: ha or m or km

*Add the underlined text to the second sentence of the item description to read as follow:*

"The rate shall cover the cost of clearing the surface, removing boulders of size up to 0,15 m<sup>3</sup>, grubbing of trees and tree stumps (except large trees (with girth over 1m) and stumps as specified in 8.2.2 below), cutting of trunks and branches exceeding 0,5m up to 1.0m in girth into transportable lengths....."

*Add the following to the pay item description:*

"The rate shall include for transport and disposal of material and debris to unspecified site and disposal thereof."

"The area (in ha) shall comprise the entire site to be cleared and grubbed within the limits to be indicated by the engineer on site in writing.

The area of clear and grub measured in linear meter (or km) shall be the sections outside the initial cleared area (measured in hectares), specifically applicable to pipeline routes outside the original cleared site area. The width and length shall be indicated by the engineer on site in writing."

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**PSD                    SABS 1200 D: EARTHWORKS**

**PSD 1                **CONSTRUCTION (CLAUSE 5)****

**PSD 1.1            Excavation for working space (Sub-clause 5.2.2.1 b) and c))**

*Add the following to the clause:*

Other than for the sides of strip or pad footings or where specifically authorized by the Engineer, no concrete shall be placed against the sides of excavations.

For external concrete faces below ground level, (other than concrete placed against the sides of excavations as above) the Contractor shall over-excavate to provide sufficient working space for the erection of formwork.

Tenderers shall allow in their rates for excavation for any over-excavation required for working space.

Excavation volumes for structures will be calculated as the nett volume of the structure below ground level after general site excavations have been completed. No additional payment shall be made for working space.

All water retaining structures shall be shuttered externally on vertical and on other faces inclined within 45° from the vertical.

**PSD 1.2            Inspection (Sub-clause 5.2.2.1 d))**

*Add the following to the clause:*

Excavation to final level, ready to achieve a binding layer or concrete footing, shall be completed less than 24 hours before such layer or footing is cast.

The Contractor shall arrange for the inspection by the Engineer or his Representative of all surfaces immediately before casting concrete.

**PSD 1.3            Over-excavation to sides of excavation (Sub-clause 5.2.2.1 e))**

*Add the following to the clause:*

Where the sides of excavations are over-excavated to establish safe slopes, provide access to excavations, or for other purposes not specifically required by the Engineer, such over-excavation shall be backfilled with material as required by the Engineer and compacted to a minimum density of 93% Mod AASHTO.

No separate payment will be made for this work.

**PSD 1.4            Over-excavation (Sub-clause 5.2.2.1 e))**

*Add the following to the clause:*

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If the material in the bottom of an excavation is loosened, or if there is any over-excavation, any loose or disturbed soil shall be removed, and the over-excavation shall be replaced by mass concrete mix 15 MPa.

No separate payment will be made for replace over-excavation with concrete. No separate payment will be made for over excavation as defined in PSD 1.3 and PSD 1.4.

**PSD 1.5      Trimming of surface of bulk earthworks (add the following sub-clause 5.2.2.1 f))**

Where blinding, mass or structural concrete is to be cast or where precast elements are to be placed on surfaces established by bulk earthworks, the Contractor shall:

- a) Arrange his bulk excavation operation so that over-excavation is avoided, taking into account the requirements in PSD 1.3.
- b) Over-fill embankments while placing fills as necessary to allow for trimming and arrange his compaction operations to ensure that the specified density is achieved throughout the finally trimmed embankment; and
- c) Shortly before casting concrete or placing precast elements, carefully remove the final layer and trim such surfaces to the design levels and profiles within Grade II degree of accuracy.

**PSD 1.6      Disposal of surplus material (Sub-clause 5.2.2.3)**

*Add the following to the clause:*

All surplus material from bulk excavation for concrete units and for pipework shall be dumped, leveled and spread on site at the areas as indicated by the Engineer. No dumping shall be undertaken prior to obtaining detailed instructions from the engineer.

**PSD 1.7      Freehaul (Sub-clause 5.2.5.1)**

*Replace the sub-clause with the following:*

All haul within the site of works or within a distance of 1.0 km outside the extremities of the boundaries of the contract as indicated on the drawings shall be regarded as freehaul.

**PSD 2      MEASUREMENT AND PAYMENT (CLAUSE 8)**

**PSD 2.1      Restricted excavation (add the following to sub-clause 8.3.3)**

*Add the following to this item:*

The volume of restricted excavation will be calculated from the net plan dimensions and the difference between the original ground profiles (or terraces), and the blinding layer (or no-fines) levels shown on the drawings. On the sides, the volume will only be calculated to the outside dimensions of the concrete structures. No additional payment will be made for the provision of working space, although it will be provided.

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**PSG                SABS 1200 G: CONCRETE (STRUCTURAL)**

**PSG 1                SCOPE OF WORKS**

This specification covers the construction of all structural concrete elements.

**PSG 2                CONSTRUCTION**

**PSG 2.1                Classification of finishes (Sub-clause 5.2.1)**

*Add the following to the sub-clause:*

Concrete surfaces which will be in contact with the natural ground or which will otherwise be covered on completion of the works, shall have a rough finish as specified in sub clause 5.2.1 (a).

Horizontal surfaces and surfaces with a slope not exceeding one vertical to two horizontal shall be finished to a woodfloat finish. For this finish the surface must be given a finish as specified in sub-clause 5.5.10.1 and after the concrete has hardened sufficiently, it shall be floated to a uniform surface free of trowel marks.

The finished surface shall be accurate to degree 1 as defined in sub-clause 6.2.

The visible vertical or near vertical surfaces of valve chambers, and culvert head walls or parapets shall be finished to a smooth surface, repaired and rubbed to remove projections.

The bagging of concrete surfaces to repair defects will not be permitted. All concrete edges shall be provided with 25 mm x 25 mm chamfers.

**PSG 2.2                Cover (Sub-clause 5.1.3 and 5.5.1.5)**

*Add the following to the sub-clauses:*

The exposure conditions for all structures in the works shall be deemed to be "severe". The minimum cover to reinforcement shall be 40 mm for water retaining concrete and 25 mm for all other concrete, unless otherwise specified on the Engineers drawings and bending schedules.

**PSG 2.2.1                Spacers for reinforcement (sub-clause 5.1.3)**

*Add the following to the sub-clause:*

Spacers of approved design include purpose made precast mortar blocks. No plastic spacer blocks will be allowed.

Where mortar blocks are used, they shall be properly shaped so as not to slip out of position and shall be made of the same mix as the mortar of the concrete in which they are to be placed.

The mortar shall be well compacted by approved means into the moulds to result in blocks with a density of at least 2 300 kg/m<sup>3</sup>; and which are free from honeycombing. They shall be cured in

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water for at least seven days. Mortar blocks which have not been manufactured and cured strictly in accordance with these requirements or which are in any other way considered unsatisfactory by the Engineer, will be rejected and shall be removed from the Site.

**PSG 2.3      Strength concrete (Sub-clause 5.5.1.7)**

*Add the following sub-clause:*

The grade of strength concrete for each portion of the works will be indicated on the drawings and/or specified in the Schedule of Quantities. The grade of concrete will be designated as "Class S/A", where "S" is the characteristic strength in Mpa and "A" is the maximum nominal size of coarse aggregate in mm.

With the exception of mixes weaker than 15 Mpa, all concrete for the Works shall be considered to be strength concrete in terms of Sub-clause 5.5.1.7.

No concrete shall be cast until the mix designs have been approved by the Engineer. The Engineer may call for revised mix designs at any stage during the contract.

Contractor to supply and test 6 No. cube test results for approval prior to commencement of the works.

Unless otherwise specified on the drawings or in the Schedule all structural concrete shall have a strength of 35 Mpa.

The concrete to be used on this contract shall be as follows:

- (a) For all water retaining structures (including reservoir roofs), 35/19 MPa with a minimum cement content of 360 kg/m<sup>3</sup> and a maximum of 420 kg/m<sup>3</sup>. The maximum water content shall not exceed 210 liter/ m<sup>3</sup>. The slump limits shall be 10-60mm. The water/cement ratio shall not be greater than 0,53.
- (b) For all other structures not in contact with water 25/19 MPa concrete.
- (c) For anchor blocks, benching and mass concrete, 15/19 MPa concrete.
- (d) For no-fines concrete 15/19 Mpa concrete

These mixes shall be designed for vibration. All data reports prepared by the Institute shall be submitted to the Engineer for information and approval.

**DESIGN OF CONCRETE MIX:**

The concrete mix design shall be prepared by an approved independent laboratory and submitted to the Engineer for approval. Historical data shall be provided for a similar mix design to the same strength.

The successful Tenderer will be required to submit samples of the fine and coarse aggregate which he proposes using, to an approved laboratory for tests regarding the suitability of such aggregates. The laboratory shall prepare trial mixes of the two stronger grades of concrete required for the contract to establish acceptable design mixes.



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**PSG 2.4      Formwork and finishes (Sub-clause 5.2)**

*Add the following to the sub-clause:*

**FORMWORK TIES**

The use of sleeves through the concrete for formwork ties will not be permitted. Ties, when cast in, shall have some form of positive shear key to prevent any rotation when loosening formwork.

The formwork ties and bolt holes shall be placed with regularity and precision.

The finish of exposed concrete surfaces of concrete structures shall be “smooth” as detailed in (b) of sub-clause 5.2.1.

**FILLETS AND CHAMFERS**

All internal and external angles in concrete works shall have 25 mm x 25 mm fillets and chamfers unless shown otherwise on the drawings.

The units rate tendered for formwork shall cover the cost of forming these chamfers and fillets.

**PSG 2.5      Joints (Clause 5.5.7)**

*Add the following to the sub-clauses:*

**PSG 2.5.1      General**

Notwithstanding Sub-clause 2.4.3 “designated joints” shall only be joints shown on the drawings and in the Schedule. Further joints required by the Contractor because of construction limitations or any other reason, shall be deemed to be “undesigned joints”.

The position and pattern of all joints (designated or undesigned) shall be to the Engineer’s approval.

All joints (designated or undesigned) except expansion and contraction joints shall be treated in accordance with Sub-clause 5.5.7.3.

Joints between tank bottoms, floors or wall bases and the walls and columns standing on them, shall not be made flush with the supporting surface, but shall be made in the wall or the column a distance of 140 mm above the base. The 140 mm high “riser” shall be cast as an integral part of the bottom, floor or base, i.e. the concrete in the riser shall be deposited at the same time as the concrete in the bottom, floor or base adjacent to it.

In cases where there is a fillet at the bottom of the wall or column, the construction joint shall be made 140 mm above the fillet.

The Contractor should note that the details of the undesigned joints shall be identical to the designated joints shown on the drawings where the joint is in a similar situation and performs the same duty.

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The Contractor shall further note that the position and the type (where no identical designated joints exist) of undesignated joints shall be subject to the Engineer's approval.

**PSG 2.5.2      Construction joints (Sub-clause 2.4.3 and 5.5.7)**

All joints other than expansion, contraction or other movement joints, shall be treated as follows :

As soon as practical, but not before 15 hours after placing, the joint surface shall be prepared to receive fresh concrete.

This preparation, as specified in Sub-clause 5.5.7.3 (a) to (d) shall be such as to remove all laitance or inert and strengthless material which may have formed and the specified chipping and sand blasting shall be such as to produce a roughened surface all over.

Concrete surfaces, where concreting is interrupted, shall be protected from the sun as specified in Sub-clause 5.5.8 (d).

**PSG 2.5.3      Construction joints (Sub-clause 5.5.7.3)**

No vertical construction joints other than those shown on the Drawings may be formed without prior approval. Horizontal construction joints may be formed if the method of construction does not allow for one continuous pour. However, these construction joint will be indicated to and approved by the Engineer. It must be noted that should the Contractor wish to form a construction joint in water retaining concrete, the watertightness of this joint will remain the responsibility of the Contractor. In addition to the precautions to be taken as prescribed under clause 5.5.7.3, the Contractor may ensure watertightness by providing additional means (such as a bandage on the joints or wet to dry epoxy) to the approval of the Engineer. No additional payment will be made to the Contractor for ensuring that construction joints are watertight and the Contractor will have to include such costs in the rate for the concrete.

**PSG 2.5.4      Expansion and construction joints**

Expansion and contraction joints shall be made in the position and to the details shown on the drawings.

The specified filler strips shall be attached to the complete side of the straight or grooved concrete joint by means of an approved adhesive.

**PSG 2.6      Items to be casted in or grouted into concrete (sub-clause 5.4)**

*Add the following to the sub-clauses:*

**PSG 2.6.1      Fixing for equipment and pipe specials supplied under this Contract**

- a) The Contractor will be responsible for the forming of pockets and grouting in of pipe items and/or holding down bolts for equipment supplied under the contract.

- 
- b) Upon completion of the positioning and alignment of equipment, the Contractor shall, grout up pipe items, pockets and base plates (subject to (c) below) necessary for the permanent installation of the equipment.

b) Only after the Engineer is satisfied with the alignment and the level of each item of plant shall the Contractor grout up the base plates/pipe specials with an approved non-shrink grout.

**PSG 2.6.2      Fixing for equipment supplied under this contract**

Holding down bolts or other fixings required for the installation of handstops, crane beams, ladders, handrails and other items supplied under the Contract, shall be provided by the Contractor. These fixings shall be cast in or grouted into pockets or installed by other means as approved by the Engineer.

Where anchor bolts are used which are installed into holes drilled into concrete or masonry, these shall be a type approved by the Engineer.

All anchor bolts shall be stainless steel grade 316.

**PSG 2.6.3      Pipes and conduits embedded in concrete**

Except with the written approval of the Engineer, no pipes other than those shown on the drawings shall be embedded in concrete and the approval of the Engineer for the position of all services to be embedded shall be obtained before concreting commences.

The clear space between pipes of any kind embedded in reinforcement concrete and the clear space between such pipes and reinforcement shall not at any point be less than:

- (a) 40 mm, or
- (b) 5 mm plus the maximum size of coarse aggregate, whichever is the greater.

**PSG 2.6.4      Casting/grouting in of pipes and specials**

Where pipes are to be cast into concrete, the Contractor shall provide a box-out in the wall and grout the unit in at a later stage. When constructing such a box-outs, reinforcement shall not be cut, but shall run through the opening. Reinforcement shall be cut and/or bent out at a later stage to suit the item being cast in. After installation of the item the remaining reinforcement shall be bent back in position.

Where box-outs for pipes/specials have been provided in the walls, the Contractor shall be responsible for the grouting in of such pipes/specials regardless of whether or not these have been supplied by himself.

An approved non-shrink grout shall be used for the grouting in of pipes and specials after they have been positioned. The details and method statement is to be submitted to the Engineer for approval prior to the commencement of any grouting. The approval by the Engineer shall not relieve the Contractor from his obligation to provide a watertight joint between the concrete and grout used.

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**PSG 2.7            Curing and protection (Sub-clause 5.5.8)**

*Add the following to the sub-clauses:*

Level or gently sloping surfaces shall be cured by one of the methods described in Sub-clause 5.5.8 (a) or (b) and vertical surfaces by the methods described in Sub-clause 5.5.8 (e) for a period of five days after casting for an ambient temperature of 5°C or above and for eight days for an ambient temperature of below 5°C.

**PSG 2.8            Concrete surfaces (Sub-clause 5.5.10)**

*Add the following to the sub-clauses:*

**PSG 2.8.1        Screed finish**

After placing and compacting, the concrete on a top (unformed) surface shall be struck off with a template to the designated grades and tamped with a tamping board to compact the surface thoroughly and to bring mortar to the surface, leaving the surface slightly ridged but generally at the required elevation. No mortar shall be added, and noticeable surface irregularities caused by the displacement of coarse aggregate shall be made good by re-screeding after the interfering aggregate has been removed or tamped.

**PSG 2.8.2        Wood float finish**

Where wood floating is ordered or scheduled, the surface shall first be given a finish as specified in PSG 2.5. and, after the concrete has hardened sufficiently, it shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screed marks.

**PSG 2.8.3        Steel float finish**

The surface of tank bottoms, floors and roof slabs, etc. shall be given a steel float finish in accordance with Sub-clause 5.5.10. To Degree 1 accuracy.

**PSG 2.8.4        Power floated finish**

Where power floating is required the surface shall be treated as specified in PSG 3.11.2 to a degree necessary.

**PSG 2.9            Screeds (add the following sub-clause 5.5.16)**

**GRANOLITHIC SCREED**

Granolithic screed shall consist of: Cement - 1 part; Sand - 1.25 part; Coarse aggregate - 2 parts.

The coarse aggregate shall consist of granite or other approved chips which shall pass a 10 mm sieve and be retained on a 5mm sieve.

The cement/water ration of the mix shall be at least 2,0 mass.

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**PSG 2.10      Repairs and defects (add the following sub-clause 5.5.17)**

All defects to the concrete shall be attended to, in full, as soon as possible after the formwork is removed. Further concreting of the element concerned may be prohibited by the engineer until he is satisfied that this remedial work has been satisfactorily attended to.

**PSG 2.11      Porous Concrete (add the following sub-clause 5.5.1.8)**

Porous concrete shall be laid under foundations and floor slabs, and behind walls, etc., where shown on the drawings and where directed by the Engineer.

Porous concrete shall be placed behind shuttering to form a vertical layer against the external face of foundations, etc. where shown on drawings and where directed by the Engineer.

The thickness of the horizontal, sloping and vertical layers shall not be less than that shown on the drawings.

The exposed faces, both horizontal and vertical, of the porous concrete shall be finished with a cement mortar seal, as specified in Clause PSG2.11.3, where reinforced concrete is to be cast against it.

The schedule rates for porous concrete shall include the cost of the mortar seal and steel float finish.

Porous concrete shall comprise water, cement, coarse aggregate and not more than 5 % by mass of fine sand. Every size of aggregate shall be a single size aggregate, graded in accordance with SABS 1083.

The voids ratio of porous concrete shall not be less than 27,5 %.

No-fines concrete shall be classified by the prefix NF and the size of the aggregate to be used. Class NF19 means a no-fines concrete with a 19 mm nominal size. The volume of aggregate per 50 kg of cement is to be as follows:

<b>Class</b>	<b>Aggregate Size</b>	<b>Aggregate per 50kg cement</b>	<b>Minimum Average Strength of a set of three test cubes after 28 days (MPa)</b>
NF38	38	0.33 m <sup>3</sup>	5.5
NF19	19	0.30 m <sup>3</sup>	5.5
NF13	13	0.27 m <sup>3</sup>	5.5

**PSG 2.11.1      Batching and Mixing**

The quantity of water to be added shall be just sufficient to form a smooth grout which will adhere to and coat completely each and every particle of aggregate, and which is just wet enough to ensure that at points of contact of aggregate the grout will run together to form a small fillet to

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bond the aggregate together. The mix shall contain no more than 20 liters of water per 50 kg of cement.

Mixing shall be carried out in an approved batch type mechanical mixer. The whole batch of aggregate together with half of the water shall be placed into the mixer and mixed together for at least half a minute. The cement, followed by the balance of water, shall subsequently be added and the mixing shall continue for at least 1,5 minutes or as much longer as is necessary to ensure that all aggregates are uniformly coated with cement grout.

Testing of porous concrete shall be carried out in accordance with test method 3 of BS 1881 Part 3 : 1970.

#### **PSG 2.11.2      Placing**

The Engineer shall be timeously advised to enable him to inspect the excavations or form work before no-fines concrete is placed.

After the placing of the concrete has commenced, it shall be continued uninterrupted and may only be halted at the construction joints approved by the Engineer. Control shall be exercised to ensure that no placed green concrete lies for longer than 30 minutes before being covered with fresh concrete and that the concrete is placed in its final position within 20 minutes after the cement has been loaded into the mixer.

The concrete shall be worked sufficiently to ensure that it completely fills the space to be concreted and that adjacent aggregate particles are in contact with one another. Excessive tamping or ramming shall be avoided and under no circumstances shall the concrete be vibrated.

#### **PSG 2.11.3      Mortar seal over porous concrete**

Where concrete is to be cast against previously cast porous concrete, the surface of the porous concrete shall be sealed with a 5 mm thick layer of mortar composed of one part normal Portland cement to two parts of fine aggregate by mass, trowelled on before screed to provide a dense, smooth, uniform plane surface without filling any of the internal voids of the porous concrete. The surface of the seal shall have a steel float finish.

#### **PSG 2.11.4      Protection**

All no-fines concrete shall be protected from the elements, particularly from strong wind, flowing water, damage to the surface and loss of moisture. Protection against loss of moisture shall be accomplished by one or more of the following methods :-

- (a) Keeping form work in place.
- (b) Covering exposed surfaces with sacking or other approved material that is kept continuously wet.
- (c) Covering exposed surfaces with plastic sheeting.

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**PSG 2.11.5      Sealing of surface of no-fines concrete**

Where indicated on the drawings or instructed by the Engineer, the surface of the no-fines concrete shall be sealed with a layer of 1:8 cement mortar to prevent loss of moisture from the structural concrete.

This seal shall be placed after the no-fines concrete has hardened and must be leveled off to the same level as the top of the no-fines concrete.

**PSG 2.12      Disinfection and cleaning of reservoir (add the following sub-clause 5.6)**

The reservoir shall be disinfected by applying water containing 20mg/liter free chlorine residual for a period of 24 hrs. The reservoir will not be accepted and the Taking Over Certificate not issued unless the tests for disinfection and cleaning of the reservoir have been passed by Engineer.

**PSG 3              MATERIALS (CLAUSE 3)**

**PSG 3.1           Concrete**

**PSG 3.1.1        Cement(Sub-clause 3.2.1)**

*Add the following to the sub-clause:*

The type of cement to be used for concrete structures shall be approved by the Engineer.

**PSG 3.1.2        Storage of cement(Sub-clause 3.2.3)**

*Add the following to the sub-clause:*

Cement shall not be kept in storage for longer than eight weeks without the Engineer's permission.

Cement which has been damaged in any way or which has been stored on site for a period exceeding three months shall be condemned and removed from site.

**PSG 3.1.3        Aggregates (Sub-clause 3.4)**

*Add the following to the sub-clause:*

Concrete with reactive aggregates:

The Contractor shall supply a test certificate for the aggregate confirming that it is not reactive.

With each delivery of materials under this clause the Contractor shall supply acceptable written evidence that this clause is being complied with.

**PSG 3.1.5        Use of plumbs (Sub-clause 3.4.2)**

*Add the following to the sub-clause:*

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The use of plumbs shall not be permitted.

**PSG 3.1.6      Admixtures (Sub-clause 3.5)**

*Replace this sub-clause with the following*

Admixtures may only be used with the prior approval of the Engineer. Super plasticizers of the sulphenated naphthalene formaldehyde condensates are preferred. No air-retaining properties will be tolerated.

**PSG 3.2      Joint materials (add the following new sub-clause 3.9)**

**PSG 3.2.1      Primer**

An approved primer, fully compatible with and/or manufactured for the specified jointing and sealing materials shall be applied to the joint surfaces.

**PSG 3.2.2      Filler**

Fillers shall be closed-cell expanded polyethylene.

Fillers shall be pre-cut to suit the application with a tear-out strip for forming the specified recess for the bondbreaker and sealant.

**PSG 3.2.3      Sealer and breaker**

The elastomeric sealant shall be a two-pack polyurethane type (gun grade for vertical joints) generally conforming with the physical properties specified in SABS 110, and used with primers as specified above.

The bondbreaker placed immediately prior to application of the sealant shall be a self-adhesive vinyl type (or similar approved material) with a width the same as the joint recess into which it is to be applied.

**PSG 4      TESTING (CLAUSE 7)**

**PSG 4.1      Grouting (add the following new sub-clause 7.4)**

The Contractor shall, where so ordered, carry out a site test for each grouting procedure and each grouting gang to be used. The tests shall be carried out on a dummy bedplate similar in configuration to that which is to be grouted, but not exceeding 1 m<sup>2</sup> in area unless otherwise ordered.

When the dummy bedplate is dismantled, the underside shall show a minimum grout contact area of 80 % with reasonably even distribution of the grout over the surface grouted except that, in the case of expanding grout, the minimum grout contact area shall be 95 %. The test shall show evidence of good workmanship and materials and the results shall be to the satisfaction of the Engineer.



Subsoil drainage as detailed on drawings Add the following:

The rate tendered shall include for the delivery to site and the installation of all material to the satisfaction of the Engineer. Also included is all labour, material and equipment for the installation of subsoils as per detail.

*Add the following pay item:*

## Water tight testing of structures

i)	Reservoirs	Unit (Sum)
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The rate shall include all labour, material, plant and resources (including the supply of water) to secure water tight structures as per PSG 4.2.

Add the following pay item:

No fines concrete (NF19) to a minimum thickness of 80mm underneath structures, complete with mortar seal

Unit (m<sup>2</sup>)

The rate shall include all labour, material, plant and resources to provide a no-fines concrete layer complete with mortar seal as specified in clause PSG2.11 (porous concrete).

*Add the following pay items:*

Supply and install the following pipe pieces to be cast into concrete:

- |      |                                 |         |
|------|---------------------------------|---------|
| i)   | 110 dia uPVC pipe - 5950mm long | Unit no |
| ii)  | 40 dia uPVC pipe - 500mm long   | Unit no |
| iii) | 40 dia uPVC pipe - 5500mm long  | Unit no |

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Small pipes in diameter less than 300 mm cast into concrete to form a conduit will be measured by number. Separate items will be scheduled for different diameter pipes and different lengths. The rates shall cover the cost of supply of the pipes and cutting it to length. The installation and casting it in is measured elsewhere.

**PSG 6.6      19mm stone to reservoir roof**

*Add the following pay items:*

**Item:**

Supply and install 19mm stone on top of reservoir roof. Unit : m<sup>3</sup>

The rate shall cover all costs to supply and place 19mm stone in the thicknesses as indicated on the drawings. The cost provided shall be per reservoir complete and shall cover all transport of materials, materials and plant to be able to execute the works.

**PSG 6.7      Disinfection and cleaning of reservoirs (add the following sub-clause 8.16)**

*Add the following pay items:*

**Item:**

Disinfection and cleaning of reservoirs Unit : No

The rate shall cover all costs to supply the chemicals (chlorine) for disinfection and (disinfectant) for washing the reservoirs. All cleaning shall be conducted prior to hand over.

**PSG 6.8      Step irons (add the following sub-clause 8.16)**

*Add the following pay items:*

**Item:**

Step irons (Calcamite or similar approved) Unit : No

The rate shall cover all costs to supply and install the step iron. The rate shall include for the drilling into the concrete, supplying and installing chemical anchors as well as the setting out of the step irons in the correct position.

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**PSHA                SABS 1200 HA: STRUCTURAL STEELWORK (Sundry Items)**

**PSHA 1            MATERIALS (CLAUSE 3)**

**PSHA 1.1        Structural Steel (Clause 3.1)**

*Add the following to this clause:*

All structural steelwork, including pipe supports and ladders will be to SANS 1421 Grade 300 W. The Contractor must allow in his rates to provide for shop details. Corrosion protection to be hot dipped galvanising to the requirements of EN 10240 : 1997 and SANS ISO 1461 : 1999 unless indicated differently.

All handrails and flooring, including supports and fasteners shall be manufactured from hot dipped galvanised mild steel to the requirements of EN 10240 : 1997 and SANS ISO 1461 : 1999 unless indicated differently.

**PSHA 2            CONSTRUCTION (Clause 5)**

**PSHA 2.1        Holes for Fasteners (Clause 5.2.3)**

*Add the following to this clause:*

Holes for holding-down bolts shall not be flame-cut.

**PSHA 2.2        Welding (Sub-clause 5.2.4) (site welding)**

*Add the following to this clause:*

Manual flame-cutting is allowed only where authorised. Edges shall be grinded to be free of unevenness, defects and distortions.

Welding shall comply with SABS 044 Part III, SABS 044 Part iv and SABS 0162. Welding shall be minimum grade B welding.

The qualification of welders shall be in accordance with the relevant clauses of the above standards, and specifically SABS 044 Part III and shall be Grade 1 welders. Grade 2 welders will be permitted only with the Engineers written approval.

The Contractor shall provide evidence, acceptable to the Engineer, that welding procedures and welders have been tested in accordance with the requirements of AWS D1.1-81.

No welding shall be permitted on site without the express approval of the Engineer, with the exception of those details shown on the drawings as Site Welded.

**PSHA 2.3.4      Handrails (cause 5.2.6)**

Handrails shall be of the two rail type, ball and stanchion, top mounted, type Mentis MT 90 or similar approved.

**PSHA 2.3.5      Prefabricated open and chequer plate floors (clause 5.2.8 & 5.2.9)**

Open grid steel covers and floor panels shall be pressure locked and welded as “Maclock” type “Eggcrate” or similar approved. All span bars shall have a depth of 40mm and be of such a width and at such a spacing that the maximum deflection of any bar under a 10 kN/m² uniformly distributed load shall not exceed 1/360 of the clear span. Under no circumstances will cutting and welding be permitted on site.

Framing to open grid “Maclock” or “Eggcrate” covers or panels shall be assembled and welded to the detail as shown on the drawings.

Chequer-plate flooring shall be of 6mm minimum thickness “treadplate” flooring or similar approved with raise 5-bar pattern and lifting key holes at each end of each plate.

Frames shall be angle and bar welded together and as detailed on the drawings.

**PSHA 4              MEASUREMENT AND PAYMENT (Clause 8)**

**PSHA 4.1           Handrails (clause 8.3.2)**

*Replace sub-clause 8.3.2 with the following:*

**Item:**

- |                              |         |
|------------------------------|---------|
| a) Top mounted handrailing   | Unit: m |
| b) Side mounted handrailing  | Unit: m |
| c) Stair mounted handrailing | Unit: m |

Measurement of handrails will be made per linear meter of complete handrail and will include for rails, stanchions, bends, end caps, end bends, joints, fixing materials, welding, fixing and corrosion protection (galvanising). Differentiation will only be made between top mounted, side mounted and stair mounted handrailing. The tendered rate shall include all labour, materials, equipment etc. Where temporary scaffolding is required for the erection of handrails no additional item is schedule and the rate shall include for this. The rate shall include for supply and installation.

**PSHA 4.2           Ladders (clause 8.3.3)**

*Replace sub-clause 8.3.3 with the following:*

**Item:**

Catladders (refer dwg N3110/W/7/103-105):

SS grade 304 cat ladder Type RL1 (inside) Galvanized cat	Unit no
ladder Type RL2 (outside)	Unit no

Ladders will be measured by number or specified length. The unit rate will be held to include for all materials and fastening supplied, for welding, erection and corrosion protection (galvanising). The rate shall include for supply deliver and installation. The fasteners shall be the same material as the ladders.

**PSHA 4.3      Open grid/chequer plate flooring (clause 8.3.4)**

*Replace sub-clause 8.3.4 with the following:*

Item:

Open grid flooring (refer dwg N3110/W/7/100)

Supply and install cast-in 25mm Bearer Bars floor grating with 45 x 45 x 5 mm SS angle support complete with fishtail lugs

Unit: m<sup>2</sup>

*Add the following to the clause:*

The open grid or chequer plate flooring covers or panels will be measured by area, and the unit rates will be held to include for all cutting, welding, galvanising, etc. The cast-in angle support will be measured separately per linear meter. This rate will include for installation, galvanising, fixing complete with cement mortar and/or bolts/fishtail lugs which may be required to secure the frame. The rate shall include for supply and installation.

**PSHA 4.4      Pipe Supports (additional clause 8.3.10)**

*Add the following new pay item:*

Pipe Supports:

Supply and install complete pipe support as per detail drawing: dwg N/3110/RWW/11/025RA (Pump Station)

Type 2 (GMS)	Unit no
Type 1 (GMS)	Unit no

Pipe supports will be measured by number. The unit rate will be held to include for all materials supplied, for welding, drilling of holes, bolts, erection and corrosion protection. The rate shall include for supply and installation.

**PSHA 4.5      Manhole cover and frame (additional clause 8.3.7)**

*Add the following new pay item:*

Access manhole cover and frame (refer dwg N3110/W/7/100):

Supply and install lockable manhole cover and frames as per detail drawing

Unit no

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*Add the following to the clause:*

Manhole covers and frames will be measured by number. The unit rate will be held to include for all materials and fastening supplied, for welding, erection and corrosion protection (galvanizing if required). The rate shall include for supply and installation complete.

**PSHA 4.6      Ventilation Pipe (additional clause 8.3.8)**

*Add the following new pay item:*

Ventilation pipe (refer dwg N3110/W/7/100):

Supply and install complete ventilation pipe as per detail drawing

Unit no

Ventilation pipes will be measured by number. The unit rate will be held to include for all materials supplied, for welding, erection and corrosion protection (galvanising). The rate shall include for supply and installation.

**PSHA 4.7      Level Indicator (additional clause 8.3.9)**

*Add the following new pay item:*

Level Indicator

Supply and install complete reservoir level indicator

Unit no

Reservoir level indicators will be measured by number. The unit rate will be held to include for all materials supplied (bolts, indicator plate, cable, float, guides, etc), welding, erection and corrosion protection (galvanising). The rate shall include for supply, deliver and installation.

**PSHA 4.8      Crawl Beam (additional clause 8.3.10)**

*Add the following new pay item:*

**Crawl Beam:**

Supply and install complete I-sections complete with fasteners, corrosion protection (galvanized) and end stops.

a) 305x165x45 kg/m I-beam at Pump Station

Unit m

The I-sections will be measured by linear meter. The unit rate will be held to include for all materials supplied, for welding, erection and corrosion protection (galvanising) and fixing. The rate shall include for supply and installation and shall include for all connections (bolted or welded).

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**PSHA 4.9      Pipe bridge structure (clause 8.3.2)**

*Add the following new pay item:*

**Item:**

a) Pipe bridge structure over irrigation canal complete Unit: no

The pipe bridge shall be constructed as per the detail drawings. Shop drawings to be provided. Measurement of the structure shall be as a complete unit comprising all materials, labour, transport, manufacture, erection and corrosion protection. The tendered rate shall also include all labour, materials, equipment etc to install the pipe over the bridge. The rate provided shall include all temporary scaffolding or any other temporary work required.

**PSHA 4.10      Bridge fastening brackets (clause 8.3.2)**

*Add the following new pay item:*

**Item:**

a) Pipe holding brackets to bridge structure complete Unit: no

The pipe holding brackets shall be constructed as per the detail drawings. Shop drawings to be provided. Measurement of the structure shall be as a complete unit comprising all materials, labour, transport, manufacture, erection and corrosion protection. The rate provided shall include all temporary scaffolding or any other temporary work required. The rate shall include all drilling, chemical anchoring etc. to fasten the bracket to the bridge structures and to fasten the pipe to the brackets. Brackets to be hot dip galvanised.

**PSHA 4.11      Hoop Strap (additional clause 8.3.9)**

*Add the following new pay item:*

Pipe line hoop strap (refer dwg. N/3110/RWW/11/025RA):

Construct and install steel hoop strap as per N/3110/RWW/11/025RA: Unit no

Hoop straps will be measured by complete number. The unit rate will be held to include for all materials supplied, for welding, corrosion protection, fastening, etc. The Contractor shall provide to the engineer a sample of the intended hoop strap for approval prior to final order and installation.

The rate shall include all bolts, nuts and other required fastening equipment.

**PSHA 4.12      Open grid/chequer plate flooring (clause 8.3.4)**

*Replace sub-clause 8.3.4 with the following:*

**Item:**

Open grid flooring (refer dwg N3110/W/8/097)

Supply and install HDG floor grating, bearer bar=40mm Unit: m<sup>2</sup>

*Add the following to the clause:*

The open grid or chequer plate flooring covers or panels will be measured by area, and the unit rates will be held to include for all cutting, welding, galvanising, etc. The cast-in angle support will be measured separately per linear meter. This rate will include for installation, galvanising, fixing complete with cement mortar and/or bolts/fishtail lugs which may be required to secure the frame. The rate shall include for supply and installation.

**PSHA 4.13      Pipe Supports (additional clause 8.3.10)**

*Add the following new pay item:*

Pipe Supports:

Supply and install complete pipe support as per detail drawing: dwg N/3110/W/8/007 (Reservoir)

Type D (SS)	Unit no
Type D (GMS)	Unit no

Pipe supports will be measured by number. The unit rate will be held to include for all materials supplied, for welding, drilling of holes, bolts, erection and corrosion protection. The rate shall include for supply and installation.