



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

**DEPARTMENT OF WATER AND SANITATION
REPUBLIC OF SOUTH AFRICA**

DUE AT	
CLOSING DATE	
BID NUMBER	
DESCRIPTION:	
SUBMIT TENDER DOCUMENT TO	
POSTAL ADDRESS: Director-General Water and Sanitation Private Bag X313 PRETORIA, 0001	TO BE DEPOSIT IN: The Tender Box at the entrance of Zwamadaka Building 157 Francis Baard Street (Formerly Schoeman Street) PRETORIA, 0002

TENDERER: (Company address and stamp)

COMPILED BY: DEPARTMENT OF WATER AND SANITATION

1. EVALUATION CRITERIA

1.1 Evaluation **Method 4**, which entails the balance between **Functionality, Financial offer and preferences** and **90-10** points system, will be adopted as follows;

1.1.1 Functionality Points = max 100 points (Minimum threshold = 65%)

1.1.2 Price = 90 points (tenders will be awarded 90 points for price)

1.1.3 Preference (B-BBEE) = 10 points

1.2 The following criteria would be applicable to evaluate qualifying proposals:

PHASE 1: ADMINISTRATION

The following documents are required with your response (**FAILURE TO SUBMIT THEM WITH YOUR BID WILL RENDER YOUR BID NON-RESPONSIVE AND DISQUALIFIED. THIS EXCLUDES SUBMISSION OR NON-SUBMISSION OF A B-BBEE CERTIFICATE**):

No	Returnable Document	Yes	No
1	Original or copy of a Valid Tax Clearance Certificate (Refer to SBD 2)		
2	Company registration certificates CIPRO / CIPC and Identity Documents of shareholders (attach certified copies)		
3	Certified copy of B-BBEE Contribution Level Certificate		
4	Proof of registration and grading with the Construction Industry Development Board (CIDB) CIDB 5 CE		
5	Latest audited Annual Financial Statements		
6	Letter of Good Standing from Compensation Commissioner which is valid		
7	Completion, signing and inclusion of standard bidding documents (SBD) (SBD 1, SBD 3, SBD 4, SBD 6.1, SBD 8, SBD 9)		

PHASE 2: FUNCTIONALITY

In Phase 2, Tenderers will be assessed on the quality of the methodology; qualifications and experience of key personnel proposed for this project; proposed construction programme; Socio-Economic Development (SED) Plan. Bidders must score at least 65 out of 100 in respect of functionality in order to qualify for advancement to Phase 2. A bidder that scores less than **65 out of 100** will be regarded as submitting a non-responsive bid and will be disqualified. Bidders who fail to obtain a minimum score for each criterion will be disqualified.

The weight that will be allocated to each functionality criterion is as follows

Values: 1= Poor; 2=Average; 3=Good; 4=Very Good; 5=Excellent

Criteria		Guideline Weighing Points Project Rand Value > R 500 000		
		Points Value	Weight of Criterion	Bidder Score
Functionality	Methodology:		25	
	A method statement must be completed and submitted with the bid document. indicate the following:			
	An outline of how the specific scope of works will be completed	5		
	The personnel and plant which will be used for the specific scope of works	5		
	Quality control procedures for the specific scope of works	5		
	Health and safety procedures for the specification scope of works	5		
	Risk management processes for the specific scope of works	5		
	Team Capability:		40	
	Submit a project Organogram with key personnel proposals.	8		
	Schedule of similar work (in civil, specialist works)	8		
	Qualifications and experience of key personnel proposed for this project	8		
	1 page resume of each key project team member must be submitted with the bid indicating, amongst others, relevant qualifications, experience	8		
	Accreditation/affiliation of key project team members (where relevant)	8		

	Proposed Maintenance Programme:			
	A proposed detailed Gantt chart must be submitted or other similar programmes may be used and supporting documents must be submitted	5	25	
	Target date (Lead time very critical)	5		
	Clear activity description	5		
	Critical Path	5		
	List of resources per activity	5		
	Socio-Economic Development (SED) Plan:		10	
	Bidders must submit a detailed SED Plan, indicating how 25% of this contract value of the project will contribute towards:			
	Employment creation (local women; youth; PwDs; etc) (within Local and District municipality of where the project is done) <ul style="list-style-type: none"> Two Non-skilled personnel (2) Two Skilled personnel (2) 	4		
	Development and procurement from SMMEs and local enterprises owned by Africans; women; youth and PwDs. <ul style="list-style-type: none"> Transport (2) Consumables (1) 	3		
	Skills development (local labour / community; DWS officials and emerging enterprises). (within Local and District municipality of where the project is done) <ul style="list-style-type: none"> Two Learners mechanical – Could be from FET colleges or community (3) 	3		
TOTAL			100	

Note to Bidders the bidder is expected to achieve a minimum threshold score for functionality of **65% for CIDB Grade 5** to qualify for further evaluation. Further evaluation is based on Preference (90/10) after the minimum score has been achieved by the bidder.

Phase 3- B-BBEE and price

B-BBEE points

Bidders should note that points may be claimed for B-BBEE in terms of the Preferential Procurement Regulations, 2011. Such claim should be accompanied by either an original or certified copy of a B-BBEE Contribution Level certificate issued by a SANAS-accredited agency or Auditors, a letter from a company Accountant or an Affidavit in case of an Exempted Micro Enterprise (EME). EMEs are allowed to submit a sworn affidavit obtainable from the DTI.

	Procurement Preferencing (B-BBEE Level Certification)	Point Allocation
	B-BBEE Level 1 Certifications	10
	B-BBEE Level 2 Certifications	9
	B-BBEE Level 3 Certifications	8
	B-BBEE Level 4 Certifications	5
	B-BBEE Level 5 Certifications	4
	B-BBEE Level 6 Certifications	3
	B-BBEE Level 7 Certifications	2
	B-BBEE Level 8 Certifications	1
	<i>Non-Compliant Contributor</i>	0
	Total	10

Price

A detailed financial proposal must be submitted with the bid. Each item of the financial proposal must be linked to a specific deliverable of the BoQ.

CONTENTS

DOCUMENTS THAT RELATE TO THE TENDER	
Doc. No	DOCUMENT
SBD 1	INVITATION TO BID
SBD 2	APPLICATION FOR TAX CLEARANCE CERTIFICATE
SBD 3.1	PRICING SCHEDULE: PURCHASES (FIRM PRICES)
SBD 4	DECLARATION OF INTEREST
SBD 6.1	PREFERENCE POINTS CLAIM FORM I.T.O. THE PPR, 2011: PURCHASES GREATER THAN R1 000 000.00
SBD 8	DECLARATION OF BIDDER'S PAST SCM PRACTICES
SBD9	CERTIFICATE OF INDEPENDENT BID DETERMINATION

DOCUMENTS THAT RELATE TO THE CONTRACT		
Doc No.	DOCUMENT	PAGE No.
PART C1	AGREEMENT AND CONTRACT DATA	C1.1
C1.1	GENERAL CONDITIONS OF CONTRACT	C1.3
C1.2	CONTRACT DATA	C1.3
C1.3	FORM OF OFFER AND ACCEPTANCE	C1.13
C1.4	PERFORMANCE GUARANTEE	C1.18
C1.5	AGREEMENT IN TERMS OF OSHA no. 85 OF 1993	C1.20
PART C2	PRICING DATA	C2.1
C2.1	PREAMBLE TO BILL OF QUANTITIES	C2.4
C2.2	BILL OF QUANTITIES	C2.7
C2.3	DAYWORKS SCHEDULE	C2.8
PART C3	SCOPE OF WORK	C3.1
C3.1	APPLICABLE STANDARD SPECIFICATIONS	C3.3
C3.2	PROJECT SPECIFICATIONS	C3.4
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C3.5	DRAWING LIST	C3.35
Appendix A	PS EMP - Environmental Management Plan	C3.36
Appendix B	PS OSHA - OCCUPATIONAL HEALTH AND SAFETY	C3.38

Note:

The Tenderer shall satisfy himself that this document is complete in accordance with the above schedule and if any pages are found to be missing or duplicated, shall immediately request the Employer/Engineer to rectify the discrepancy. No liability will be admitted by the Employer in respect of errors in the Tenderer's tender due to the foregoing.

DOCUMENTS THAT RELATE TO THE TENDER
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water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

SBD 1

INVITATION TO BID

**YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS
OF THE (NAME OF DEPARTMENT/PUBLIC ENTITY)**

BID NUMBER: DWS56-1016WTE CLOSING DATE: 24 NOVEMBER 2016 CLOSING TIME: 11:00

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

BID DOCUMENTS MAY BE POSTED TO:

DIRECTOR-GENERAL: WATER AND SANITATION
PRIVATE BAG X313
PRETORIA, 0001

OR

DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS):

THE TENDER BOX AT THE ENTRANCE OF ZWAMADAKA BUILDING
157 Francis Baard Street
PRETORIA, 0002

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

The bid box is generally open 24 hours a day, 7 days a week.

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

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

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

NAME OF BIDDER _____

POSTAL ADDRESS _____

STREET ADDRESS _____

TELEPHONE NUMBER CODE _____ NUMBER _____

CELLPHONE NUMBER _____

FACSIMILE NUMBER CODE _____ NUMBER _____

E-MAIL ADDRESS _____

VAT REGISTRATION NUMBER _____

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE BEEN SUBMITTED? (SBD 2)

☐

YES

☐

NO

HAS A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE BEEN SUBMITTED? (SBD 6.1)

☐

YES

☐

NO

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

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

☐

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

☐

A REGISTERED AUDITOR

☐

[TICK APPLICABLE BOX]

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

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

☐

YES

☐

NO

[IF YES ENCLOSE PROOF]

SIGNATURE OF BIDDER _____

DATE _____

CAPACITY UNDER WHICH THIS BID IS SIGNED

TOTAL BID PRICE _____ TOTAL NUMBER OF ITEMS OFFERED _____

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Department: SCM-WTE

Contact Person: Julia Dirane / Thembeke Hlazo / Thandi Plaatje / Anele Ndamase

Tel: 012 336 3182 / 012 336 7066 / 012 336 8364 / 012 336 7432

Fax: 012 336 6963

E-mail address: diranej@dws.gov.za/hlazot@dws.gov.za/plaatjet@dws.gov.za/ndamasea@dws.gov.za

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Contact Person: Bradley Africa

Tel: 012 336 8963

Fax: 012 336 8786

E-mail address: africab2@dws.gov.za

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 complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- 2 SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3 The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 5 Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
- 6 Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.

Application for a Tax Clearance Certificate

Purpose

Select the applicable optionTenders ☐ Good standing ☐

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

Particulars of applicant

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

Particulars of representative (Public Officer/Trustee/Partner)

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

Tender number	<input type="text"/>
Estimated Tender amount	R <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/>
Expected duration of the tender	<input type="text"/> <input type="text"/> <input type="text"/> year(s)

Date started	Date finalised	Principal	Contact person	Telephone number	Amount

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

If "YES" provide details

YES	NO
-----	----

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

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

Signature of representative/agent

- -

Date

Name of representative/agent

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

Signature of applicant/Public Officer

C

C

Y

Y

—

M

M

—

D

D

Date

Name of applicant/
Public Officer

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

PRICING SCHEDULE – FIRM PRICES (PURCHASES)

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of bidder.....	Bid number DWS56-1016WTE
Closing Time 11:00	Closing date... 24 NOVEMBER 2016

OFFER TO BE VALID FOR...**120**.....DAYS FROM THE CLOSING DATE OF BID.

ITEM NO.	QUANTITY	BID PRICE IN RSA CURRENCY ** (ALL APPLICABLE TAXES INCLUDED)
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DESCRIPTION: **MARICO-BOSVELD DAM SAFETY REHABILITATION PROJECT**

-
- Required by:
 - At:
.....
 - Brand and model
 - Country of origin
 - Does the offer comply with the specification(s)? *YES/NO
 - If not to specification, indicate deviation(s)
 - Period required for delivery
*Delivery: Firm/not firm
 - Delivery basis

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

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

*Delete if not applicable



SBD 4 DECLARATION OF INTEREST

- 1 Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

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

- 2.1 Full Name of bidder or his or her representative _____

- 1.2 Identity Number:

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

- 1.3 Position occupied in the Company (director, trustee, shareholder², member):

- 1.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:

- 1.5 Tax Reference Number:

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

- 1.6 VAT Registration Number:

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

1.6.1 The names of all directors/trustees/shareholders/members, their individual identity numbers, tax reference numbers and, if applicable, employee/PERSAL numbers must be indicated in paragraph 3 below.

¹"State" means –

- (a) 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);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

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

2.7 Are you or any person connected with the bidder presently employed by the state?

YES

NO

2.7.1 If so, furnish the following particulars:

Name of person/director/trustee shareholder/
member:

Name of state institution at which you or the
person connected to the bidder is employed:

Position occupied in the state institution:

Any other particulars:

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector?

YES

NO

2.7.2.1 If yes, did you attach proof of such authority to the bid document?

YES

NO

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.)

2.7.2.2 If no, furnish reasons for non-submission of such proof:

2.8 Did you or your spouse, or any of the company's directors/trustees/shareholders/members or their spouses conduct business with the state in the previous twelve months?

YES

NO

2.8.1 If so, furnish particulars:

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid?

YES

NO

2.9.1 If so, furnish particulars

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid?

YES

NO

2.10.1 If so, furnish particulars.

2.11 Do you or any of the directors/trustees/shareholders/members of the company have any interest in any other related companies whether or not they are bidding for this contract?

YES

NO

2.11.1 If so, furnish particulars:

3 Full details of directors/trustees/members/shareholders

Full Name	Identity Number	Personal Income Tax Reference Number	State Employee Number/Persal Number

4 DECLARATION

I, THE UNDERSIGNED (NAME) _____

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature

Date

Position

Name of bidder

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

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

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011.

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all bids:
- the 90/10 system for requirements with a Rand value above R1 000 000 (all applicable taxes included).
- 1.2 The value of this bid is estimated to exceed R1 000 000 (all applicable taxes included) and therefore the **90\10** system shall be applicable.
- 1.3 Preference points for this bid shall be awarded for:
- (a) Price; and
 - (b) B-BBEE Status Level of Contribution.
- 1.3.1 The maximum points for this bid are allocated as follows:

	POINTS
1.3.1.1 PRICE	90
1.3.1.2 B-BBEE STATUS LEVEL OF CONTRIBUTION	10
Total points for Price and B-BBEE must not exceed	100
1.4 Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.	
1.5 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.	

2. DEFINITIONS

- 2.1.1 “**all applicable taxes**” includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 “**B-BBEE**” means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 2.3 “**B-BBEE status level of contributor**” means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 “**bid**” means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- 2.5 “**Broad-Based Black Economic Empowerment Act**” means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 “**comparative price**” means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 “**consortium or joint venture**” means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;
- 2.8 “**contract**” means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 “**EME**” means any enterprise with an annual total revenue of R5 million or less .
- 2.10 “**Firm price**” means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 “**functionality**” means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 “**non-firm prices**” means all prices other than “firm” prices;
- 2.13 “**person**” includes a juristic person;
- 2.14 “**rand value**” means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.15 “**sub-contract**” means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 “**total revenue**” bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007;

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

3. ADJUDICATION USING A POINT SYSTEM

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

4. POINTS AWARDED FOR PRICE

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

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

90/10

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

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

5. Points awarded for B-BBEE Status Level of Contribution

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

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	8	16
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

- 5.2 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.
- 5.3 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 5.4 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.5 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 5.6 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.7 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- 5.8 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6. BID DECLARATION

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

7. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 5.1

7.1 B-BBEE Status Level of Contribution: =(maximum of 10 or 20 points)

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

8 SUB-CONTRACTING

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

8.1.1 If yes, indicate:

- (i) what percentage of the contract will be subcontracted?%
- (ii) the name of the sub-contractor?
- (iii) the B-BBEE status level of the sub-contractor?
- (iv) whether the sub-contractor is an EME? YES / NO (delete which is not applicable)

9 DECLARATION WITH REGARD TO COMPANY/FIRM

9.1 Name of company/firm :

9.2 VAT registration number :.....

9.3 Company registration number
:

9.4 TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

9.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

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

9.6 COMPANY CLASSIFICATION

Manufacturer
Supplier
Professional service provider

Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

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

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

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 7, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution

WITNESSES:

1.

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

2.

DATE:.....

ADDRESS:.....

.....

.....



DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

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

It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

The bid of any bidder may be disregarded if that bidder, or any of its directors have-

abused the institution's supply chain management system;
committed fraud or any other improper conduct in relation to such system; or
failed to perform on any previous contract.

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

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

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

SBD 8

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



CERTIFICATE OF INDEPENDENT BID DETERMINATION

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

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

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

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 Institution)

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

I certify, on behalf of: _____ that:
(Name of Bidder)

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

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

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

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

Signature

Date

Position

Name of Bidder

DOCUMENTS THAT RELATE TO THE CONTRACT

PART C1 : AGREEMENT AND CONTRACT DATA

CONTENTS

Doc No.	TITLE	PAGE No.
C1.1	GENERAL CONDITIONS OF CONTRACT	C1.3
C1.2	CONTRACT DATA	C1.3
C1.3	FORM OF OFFER AND ACCEPTANCE	C1.13
C1.4	PERFORMANCE GUARANTEE	C1.18
C1.5	AGREEMENT IN TERMS OF OSHA no. 85 OF 1993	C1.20

C1.1: GENERAL CONDITIONS OF CONTRACT

The General Conditions of Contract for Construction Works, 3rd Edition (2015), published by the South African Institution of Civil Engineering, is applicable to this Contract. The General Conditions of Contract are not bound into this document, but are available at the Contractor's expense from the Secretary of the South African Institution of Civil Engineering, Private Bag X200, Halfway House, Midrand, 1685 or www.saice.org.za.

C1.2: CONTRACT DATA

In terms of clause 1.1.1.8 of the General Conditions of Contract for Construction Works, 3rd Edition (2015), the following Contract Data apply to this Contract.

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

Part 1: Data Provided by the Employer

Clause	Contract Data
1.1.1.5	Replace the contents of Clause 1.1.1.5 with the following: The "Commencement Date" means the date on which the Contractor receives a written instruction from the Employer to commence with the Works. The instruction to commence with the works will not be issued later than 28 days from the date that the Agreement made in terms of the Form of Offer and Acceptance comes into effect.
1.1.1.13	Add the following to the end of this definition: The Defects Liability Period is 12 months.
1.1.1.14	Add the following to the end of this definition: This clause shall apply <i>mutatis mutandis</i> to any portion or phase of the Works that may be described in the Scope of Works or in the Contract Data, or agreed subsequently between the Contractor and the Employer, and committed to writing. The time for achieving practical completion is 6 months.
1.1.1.15	The Employer is The Minister of Water and Sanitation acting on behalf of the Government of the Republic of South Africa.
1.1.1.16	The Employer's Agent means person named as the Employer's Agent in the Contract Data or any other person appointed from time to time by the Employer and of whom the Contractor is notified, in writing, to act as Employer's Agent for the purposes of the Contract as substitute for the Employer's Agent so named. The Employer's Agent may also be referred to as the Engineer in the Contract.

Clause	Contract Data
1.1.1.17	The Employer's Agent Representative may also be referred to as the Engineer's Representative in the Contract.
1.1.1.26	The pricing strategy is Re-measurement Contract.
1.2.1	<p>Add the following to the clause:</p> <p>1.2.1.3 Sent by facsimile, electronic or any like communication irrespective of it being during office hours or otherwise.</p> <p>1.2.1.4 Posted to the Contractor's address, and delivered by the postal authorities.</p> <p>1.2.1.5 Delivered by a courier service, and signed for by the recipient or his representative.</p>
1.2.1.2	<p>The address of the Employer is:</p> <p>Sedibeng Building 185 Francis Baard Street Pretoria 0001</p>
1.3.6	<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 has been entered into by the Employer's Agent and the Employer for the Works), and the Contractor shall not furnish any information in connection with the Works to any person or organisation without the prior approval of the Employer to this effect.</p>
3.1.3	<p>The Employer's Agent is, in terms of his appointment by the Employer for the design and administration of the Works included in the Contract, required to obtain the specific approval of the Employer for the execution of the following duties:</p> <p>3.1.3.1 The issuing of an order to suspend the progress of the Works, the extra cost resulting from which order is to be borne by the Employer in terms of Clause 5.11 or the effect of which is liable to give rise to a claim by the Contractor for an extension of time under Clause 5.12 of these conditions.</p> <p>3.1.3.2 The issuing of an instruction or order to vary the nature or quantity of the Works in terms of Clause 6.3, the estimated effect of which will be to increase the Contract Price by an amount exceeding R200 000, the valuation of all variation orders in terms of Clause 6.4 and the adjustment of the sum(s) tendered for General Items in terms of Clause 6.11.</p> <p>3.1.3.3 The approval of any claim submitted by the Contractor in terms of</p>

Clause	Contract Data
	Clause 10.1.
4.1.2	<p>Add the following to the clause:</p> <p>The Contractor shall provide the following to the Employer's Agent for retention by the Employer or his assignee in respect of all works designed by the Contractor:</p> <p>4.1.2.1 a Certificate of Stability of the Works signed by a registered Professional Engineer confirming that all such works have been designed in accordance with the appropriate codes of practice.</p> <p>4.1.2.2 proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s).</p> <p>4.1.2.3 design calculations should the Employer's Agent request a copy thereof.</p> <p>4.1.2.4 engineering drawings and workshop details (both signed by the relevant professional engineer), in order to allow the Employer's Agent to compare the design with the specified requirements and to record any comments he may have with respect thereto.</p> <p>4.1.2.5 The information required to complete "As-Built" drawings in DXF electronic format after completion of the Works as per project specifications.</p> <p>The Contractor shall be responsible for the installation of the Temporary Works.</p>
4.3.3	<p>Add the following new clause:</p> <p>The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2014 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993).</p> <p>Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan.</p> <p>The Contractor shall submit an approved Health and Safety Plan to the Employer's Agent within 14 days from the date that the Agreement made in terms of the Form of Offer and Acceptance comes into effect.</p>
4.3.4	<p>Add the following new clause:</p> <p>Contractor's liability as mandatory</p> <p>Notwithstanding any actions which the Employer may take, the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2014, for which he is liable as mandatory. By entering into this Contract it shall be deemed that the parties have agreed in writing to the</p>

Clause	Contract Data
	above provisions in terms of Section 37 (2) of the Act.
4.3.5	<p>Add the following new clause:</p> <p>Contractor to notify Employer</p> <p>The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and its Regulations, including the Construction Regulations, 2014, following any incident involving the Contractor and/or Sub-Contractor and/or their employees. The Contractor shall notify the Employer in writing of all investigations, complaints or criminal charges which may arise pursuant to work performed under this Contract in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Regulations.</p>
4.3.6	<p>Add the following new clause:</p> <p>Contractor's Designer</p> <p>The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2014 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract.</p>
4.4.3	<p>Replace with the following:</p> <p>4.4.3 Nominated Subcontractors</p> <p>4.4.3.1 In the Contract, "nominated Subcontractor" means a Subcontractor:</p> <ul style="list-style-type: none"> a) who is stated in the Contract as being a nominated Subcontractor b) whom the Employer's Agent, under Clause 6.3 (Variations), instructs the Contractor to employ as a Subcontractor. <p>4.4.3.2 The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Employer's Agent as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Employer agrees to indemnify the Contractor against and from the consequences of the matter:</p> <ul style="list-style-type: none"> a) there are reasons to believe the Subcontractor does not have sufficient competence, resources or financial strength: b) the subcontract does not specify that the nominated Subcontractor shall indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or c) the subcontract does not specify that, for the subcontracted work

Clause	Contract Data
	<p>(including design, if any), the nominated Subcontractor shall;</p> <p>i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract, and</p> <p>ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or liabilities.</p> <p>4.4.3.3 The Contractor shall pay to the nominated Subcontractor the amounts which the Employer's Agent certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with Clause 6.6.1.2 (Provisional Sums and Prime Cost Items), except as stated in Clause 4.4.3.4.</p> <p>4.4.3.4 Before issuing a payment certificate which includes an amount payable to a nominated Subcontractor, the Employer's Agent may request the Contractor supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with the previous payment certificates, less applicable deductions for retention or otherwise. Unless the Contractor:</p> <p>a) submits this reasonable evidence to the Employer's Agent, or</p> <p>b) i) satisfies the Employer's Agent in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and</p> <p>ii) submits to the Employer's Agent reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement,</p> <p>then the Employer may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub –paragraphs (a) or (b) above. The Contractor shall then repay, the Employer, the amount which the nominated Subcontractor was directly paid by the Employer.</p>
4.10.3	<p>Add the following new clause:</p> <p>The Contractor shall use local labour in accordance with the requirements contained within the Bid Document.</p>
5.3.1	<p>Add the following:</p> <p>The documentation required before commencement with Works Execution are:</p> <ul style="list-style-type: none"> • Health and Safety Plan (Refer to Clause 4.3)

Clause	Contract Data
	<ul style="list-style-type: none"> Initial Programme (Refer to Clause 5.6) A detailed cash flow forecast (Refer to Clause 5.6.2.6) Security (Refer to Clause 6.2) Insurance (Refer to Clause 8.6)
5.3.2	<p>Add the following:</p> <p>The time to submit the documentation required (Refer to Clause 5.3.1) before commencement with Works execution is 14 days.</p>
5.4.2	The access and possession of Site shall not be exclusive to the Contractor but as set out in the site information.
5.6.1	<p>Add the following to the clause:</p> <p>In this regard the Contractor shall have regard for the phases and sub-phases (if applicable) for the Scheme or Development, which shall also be the order in which the Permanent Works shall be constructed, unless otherwise agreed between the parties and committed to writing. If phased construction is applicable, the phases and sub-phases will be described in the Specifications and/or will be indicated on the Phasing Plan which forms part of the Drawings.</p>
5.8.1	<p>The non-working days are Sundays.</p> <p>Special non-working days shall be 16 December to 6 January (both days included) plus South African Statutory Public Holidays.</p>
5.12.5	<p>Add the following new clause:</p> <p>Extension of time due to Abnormal Rainfall</p> <p>Extension of time for completion of the Contract shall be allowed in the event of abnormal rainfall in accordance with the following formula:</p> $V = (N_w - N_n) + (R_w - R_n)/20$ <p>Where:</p> <p>V = Extension of time in calendar days for the calendar month under consideration</p> <p>N_w = Actual number of days during the calendar month under consideration on which a rainfall of 10mm and more is recorded</p> <p>R_w = Actual total rainfall in mm recorded during the calendar month under consideration</p> <p>N_n = Average number of days, derived from rainfall records, on which</p>

Clause	Contract Data
	<p>a rainfall of 10mm and more was recorded during the relevant calendar month as will be given by the engineer.</p> <p>R_n = Average total rainfall in mm for the relevant calendar month, derived from rainfall records, as will be given by the engineer.</p> <p>Where the extension of time due to abnormal rainfall has to be calculated for portion of a calendar month, pro rata values shall be used. Should V be negative for any particular month, and should its absolute value exceed the corresponding value of N_n, then V shall be taken as being equal to minus N_n. The total extension of time to be granted shall be the algebraic sum of all the monthly extensions, provided that if this total is negative then the time for completion shall not be reduced due to subnormal rainfall.</p> <p>Rainfall records for the period of construction shall be taken on Site. The Contractor shall provide and install all the necessary equipment for accurately measuring the rainfall. The Contractor shall also provide, erect and maintain a security fence plus gate, padlock and keys at each measuring station, all at his own cost. The Employer's Agent or his Representative shall take and record the daily rainfall readings. The Contractor shall be permitted to attend these readings, in the company of the Employer's Agent's Representative. Access to the measuring gauge(s) shall at all times be under the Engineer's control.</p> <p>The rainfall records applicable to this Contract are those recorded at a suitable rainfall station near the site. General rainfall patterns, water levels and operations as well as rainfall statistics are provided in the project specifications in PS-9.</p>
5.13.1	The penalty for failing to complete the Works is 1/14 % of the Contract Price per day.
5.13.3	<p>Add the following new Clause.</p> <p>The imposition of penalties in terms of Clause 5.13.1 shall not relieve the Contractor from his obligation to complete the works, nor from any of his obligations and liabilities under the Contract.</p>
5.16.3	The Latent defect period is 10 years after the issue of the Final Approval Certificate in terms of Clause 5.16.1
6.2.1	<p>Add the following to this Clause:</p> <p>The amount of the Security shall be 10% of the Contract Price (including Value Added Tax) at the time that the Agreement comes into effect. The Security shall remain valid until the issue of the Certificate or Certificates of Completion in respect of the whole of the Permanent Works. The Pro Forma Form of Performance Guarantee bound into the General Conditions of Contract is replaced by the Performance Guarantee (Security) appended to the Contract</p>

Clause	Contract Data
	<p>Data.</p> <p>The Performance Guarantee shall be issued by a bank registered in terms of the Banks Act, 1965 (Act no. 23 of 1965) or from an insurer registered in terms of the Insurance Act, 1943 (Act no. 27 of 1943) and approved by the Employer and having an office or banking facility in the Republic of South Africa. The Performance Guarantee shall be subject to approval by the Employer and shall be in the form prescribed in the Bid documents.</p>
6.8.2	<p>The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: The value of "x" is 0.15 the portion, expressed as a decimal of unity, not subject to adjustment.</p> <p>The values of the coefficients are: a = 0.25 Labour b = 0.25 Contractor's equipment (Plant) c = 0.4 Material d = 0.1 Fuel</p> <p>"L" is the "Labour Index" and shall be the "Consumer Price Index" for Amatole and as published in the Statistical News Release, P0141, Table 13 provided in the additional tables (previously P0141.1 Table 7.1) of Statistics South Africa.</p> <p>"P" is the "Plant Index" and shall be the "Civil Engineering Plan Index" as published in the Statistical News Release P0142.1, Table 12 (previously P0142.1 Table 16) of Statistics South Africa.</p> <p>"M" is the "Materials Index" and shall be the "Civil Engineering Materials Index" as published in the Statistical News Release P0142.1, Table 11 (previously P0142.1 Table 15) of Statistics South Africa.</p> <p>"F" is the "Fuel Index" and shall be the "Diesel at wholesale level – Witwatersrand Index" as published in the Statistical News Release P0142.1, Table 12 (previously P0142.1 Table 16) of Statistics South Africa.</p> <p>The base month is the month prior to the latest date for submission of the tender.</p>
6.8.3	Price Adjustments for variations in the cost of special materials is allowed. The Contractor will be required to provide full details in Part 2 of the Contract Data.
6.8.4	Delete the words "between the Employer and the Contractor".
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%.
6.10.3	The percentage retention is 10% with no limit of retention money.
6.11.1.3	Delete "15 %" and replace it with "25 %".
8.6.1.3	The limit of indemnity for liability insurance is R10 000 000 per event, the number

Clause	Contract Data
	of events being unlimited.
10.5.3	The number of Adjudication Board Members to be appointed is 3 (three).

Clause	Contract Data		
1.1.1.9	The name of the Contractor is:		
1.2.1.2	The address of the Contractor is:		
6.2.1	The security to be provided by the Contractor shall be a Performance Guarantee of 10% of the Contract Sum (Incl. VAT):		
6.5.1.2.3	... per cent on the gross remuneration of the workmen and foremen actually engaged		
	... per cent on net cost of materials actually used		
6.8.3	The variation in cost of special materials is:		
	Special Material	Method	Price for Base Month

C1.3: FORM OF OFFER AND ACCEPTANCE

OFFER

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

MARICO BOSVELD DAM MAINTENANCE WORKS **Contract No. W 1014 WTE**

The Tenderer, identified in the offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the tender forms and schedules, and by submitting this offer has accepted the Conditions of Tender.

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

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

.....

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

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

Signature(s) _____

Name(s) _____

Capacity _____

for the Tenderer _____

(Name and address of organisation)

Name & signature of witnesses:

Date:

Witness 1 _____

Witness 2 _____

ACCEPTANCE

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

The terms of the contract, are contained in

Part C1	Agreements and Contract Data, (which includes this agreement)
Part C2	Pricing Data
Part C3	Scope of Work

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

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

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

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

Signature(s)	_____	_____
Name(s)	_____	_____
Capacity	_____	_____

for the Employer _____

(Name and address of organisation)

Name & signature of witnesses:

Date:

Witness 1 _____

Witness 2 _____

SCHEDULE OF DEVIATIONS

Notes :

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

1. **Subject**

Details

2. **Subject**

Details

3. **Subject**

Details

4. **Subject**

Details

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

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

FOR THE EMPLOYER

Signature(s) _____

Name(s) _____

Capacity _____

for the Employer _____

(Name and address of organisation)

Name & signature of witnesses:

Date:

Witness 1 _____

Witness 2 _____

FOR THE TENDERER:

Signature(s) _____

Name(s) _____

Capacity _____

for the Tenderer _____

(Name and address of organisation)

Name & signature of witnesses:

Date:

Witness 1 _____

Witness 2 _____

C1.4: PERFORMANCE GUARANTEE

Contract No: W 1014 WTE

WHEREAS (hereinafter referred to as 'the Employer') entered into, on the..... day of a Contract with (hereinafter called "the Contractor") for the construction of at

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of suretyship for the due and faithful fulfillment of such Contract by the Contractor;

AND WHEREAS has / have at the request of the Contractor, agreed to give such security;

NOW THEREFORE WE, do hereby guarantee and bind ourselves jointly and severally as Sureties and Co-principal Debtors to the Employer under renunciation of the benefits of division and excussion for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

1. The Employer shall, without reference and / or notice to us, have complete liberty of action to act in any manner authorized and / or contemplated by the terms of the said Contract, and / or to agree to any modifications, variations, alterations, directions or extensions of the Due Completion Date of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the Due Completion Date which the Employer may make, give, concede or agree to under the said Contract.
2. The Employer shall be entitled, without reference to us, to release any securities held by it, and to give time to or compound or make any other arrangement with the Contractor.
3. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.
4. Our total liability hereunder shall not exceed the sum of (R.....)
5. We hereby choose domicilium citandi et executandi for all purposes arising hereof at

IN WITNESS WHEREOF this guarantee has been executed by us at on this..... day of 20

As witnesses:

1.

2.

Signature:

Duly authorized to sign on behalf of

Address

.....

C1.5 AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT

(ACT NO. 85 OF 1993)

This AGREEMENT made at on this the day of in the year between

THE DEPARTMENT OF WATER AND SANITATION (hereinafter called "the Employer")

on the one part, herein represented by

in his capacity as

and delegate of the Employer in terms of the Employer's standard powers of delegation pursuant to the provisions of Act No 7 of 1998 and

..... (hereinafter called "the Mandatory") of

the other part, herein represented by.....in his capacity as

WHEREAS the Employer is desirous that certain works be constructed, viz PROJECT No. W 1014 WTE: MARICO BOSVELD DAM MAINTENANCE WORKS and has accepted a tender by the Mandatory for the construction, completion & maintenance of such works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSED AS FOLLOWS:

1. The Mandatory shall execute the work in accordance with the contract documents pertaining to this contract.
2. This Agreement shall hold good from its commencement date, to either :
 - a) the date of the Final Approval Certificate issued in terms of subclause 5.16 of the SAICE General Conditions of Contract for Construction Works, 3rd Edition (2015) (hereinafter referred to as "the GCC"), as contained in the contract documents pertaining to this contract, or
 - b) the date of termination of the contract in terms of clause 9 of the GCC.
3. The Mandatory declares himself to be conversant with the following:-
 - a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act.
 - i) Section 8: General duties of employers to their employees.
 - ii) Section 9: General duties of employers and self-employed persons to persons other than employees.
 - iii) Section 37: Acts or omissions by employees or mandatories and
 - iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.

- b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his sub-contractors.
- 4 In addition to the requirements of the GCC and all relevant requirements of the contract documents pertaining to this contract, the Mandatory agrees to execute all the works forming part of this contract and to operate and utilize all machinery, plant and equipment in accordance with The Act.
- 5. The Mandatory is responsible for the compliance with the Act by all his sub-contractors, whether or not nominated and/or approved by the Employer.
- 6. The Mandatory warrants that all his and his sub-contractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.
- 7. The Mandatory undertakes to ensure that he and/or his sub-contractors and/or their respective employees will at all times comply with the following conditions:
 - a) The Mandatory shall assume the responsibility in terms of Section 16.1 of The Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of The Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - b) All incidents referred to in The Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of The Act into any incident involving the Mandatory and/or his employees and/or its sub-contractors.

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

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

NAME (IN CAPITALS).....

WITNESS:.....

WITNESS:.....

NAME (IN CAPITALS).....

SIGNED FOR AND ON BEHALF OF THE MANDATORY.....

NAME (IN CAPITALS).....

WITNESS:

WITNESS:.....

NAME (IN CAPITALS).....

PART C2 : PRICING DATA

CONTENTS

Doc No.	TITLE	PAGE No.
C2.1	PREAMBLE TO BILL OF QUANTITIES	C2.4
C2.2	BILL OF QUANTITIES	C2.7
C2.3	DAYWORKS SCHEDULE	C2.8

C2.1 PRICING INSTRUCTIONS

C2.1 PREAMBLE TO BILL OF QUANTITIES

1. GENERAL

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

Where special risks, liabilities and obligations cannot be dealt with as above, then the price thereof is to be separately stated in the Preliminary and General Schedule.

An ordinary number in the reference column refers to the Conditions of Contract. A letter followed by a number in the reference column refers to an applicable Clause of the Specification.

All rates and prices entered in the Quantities shall exclude value added tax (VAT). VAT must only be added at the end of the summary contained in the Bill of Quantities.

2. DESCRIPTION OF ITEMS IN THE SCHEDULE

The short descriptions of the items in the Bill of Quantities are for identification purposes only and comply in general with the measurement and payment clauses of the Standardized Specifications, the Project Specifications and the Particular Specifications, read together with the relevant clauses of the Scope of Work and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

3. QUANTITIES REFLECTED IN THE SCHEDULE

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities, and the contract price for the completed contract shall be computed at the relevant unit rates and prices, all in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

4. PRICING OF THE BILL OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion of the work and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based. Reasonable unit rates and prices shall be entered in the Bill of Quantities as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

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

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

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

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

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

All rates and amounts quoted in the Bill of Quantities shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities.

All rates will be measured net or as described in the specifications, and no allowance has been made or will be made for waste.

The quantities as set out in the Bill of Quantities are estimated quantities of the work, they are not to be taken as the actual and final quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract.

5. PROVISIONAL SUMS

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the provisional sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Bill of Quantities, or to the stated provisional percentages and sums in the Summary of the Bill of Quantities, will not be tolerated.

6. CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

7. ARITHMETICAL ERRORS

Arithmetical errors found in the Bill of Quantities as a result of faulty multiplication or addition, will be corrected by the Engineer at the tender evaluation stage, as set out in the Tender Data.

8. MONTHLY PAYMENTS

Unless otherwise specified in the Specifications and Project Specifications, interim payment certificates, referred to in Clause 6.10.1 of the General Conditions of Contract, in respect of "sum" items in the Bill of Quantities shall be by means of interim progress instalments assessed by the Engineer and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

9. UNITS OF MEASUREMENT

The units of measurement described in the Bill of Quantities are metric units for which the standard international abbreviations are used. Abbreviations that may be used in the Bill of Quantities, including some non-standard abbreviations, are as follows:

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

C2.2BILL OF QUANTITIES

ITEM	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1		PART 1: PRELIMINARY AND GENERAL				
1.1	SANS 1200 A	SECTION: GENERAL				
	8.3	FIXED-CHARGE AND VALUE-RELATED ITEMS				
1.1.1	8.3.1	Contractual requirements	Sum	1		
	8.3.2	Establishment of facilities on the site				
	PSA-8.3.2.1	<u>Facilities for Engineer</u>				
1.1.2		(a) Furnished offices (1 No.)(PSAB-3.2) including additional items as listed in PS-7	Sum	1		
1.1.3		(b) Nameboards (1 No.) (PSAB-3.1)	Sum	1		
		(c) Provision for computer equipment	Sum	1		
1.1.4		(d) Carports (1 No.) (PSAB-4.2)	Sum	1		
	PSA-8.3.2.2	<u>Facilities for Contractor</u>				
1.1.5		All facilities scheduled in clause 8.3.2.2 of SANS 1200 A and PSA-8.3.2.2	Sum	1		
1.1.6	8.3.3	Other fixed-charge obligations	Sum	1		
		Site Clearance:				
1.1.7	8.3.4	Removal of site establishment & site rehabilitation to a state approved by Employer's agent	Sum	1		
	8.4	TIME-RELATED ITEMS				
1.1.8	8.4.1	Contractual requirements	Sum	1		
1.1.9	8.4.2	Operation and maintenance of facilities on site, for duration of construction, except where otherwise stated				
	PSA-8.4.2.1	<u>Facilities for Engineer</u>				
1.1.10		(a) Furnished offices (1 No.)	Sum	1		
1.1.11		(b) Nameboards (1 No.) (PSAB-3.1)	Sum	1		
1.1.12		(c) Provision for computer equipment	Sum	1		
1.1.13		(d) Survey assistants and materials	Sum	1		
1.1.14		(e) Carports (1 No.)	Sum	1		
	PSA-8.4.2.2	<u>Facilities for Contractor</u>				
1.1.15	PSA	All facilities scheduled in clause PSA 8.4.2.2 (a) to (l)	Sum	1		
1.1.16	8.4.3	Supervision for duration of construction	Sum	1		
1.1.17	8.4.4	Company and head office overhead costs for the duration of the contract	Sum	1		
	PSA	SUMS STATED PROVISIONALLY BY ENGINEER				
	PSA 4.2	(c) Additional tests				
1.1.18		(1) Additional tests ordered by the Engineer	Prov Sum	1		R 15 000.00
TOTAL CARRIED FOWARD						

1.1.21	8.8 PSA	TEMPORARY WORKS Main access road to works (construct and maintain) for the use of the Contractor	Sum	1		
	8.4.5	Other time - related obligations				
1.1.22	PS-8	Compliance with Site Specific Health & Safety Specification	Sum	1		
TOTAL CARRIED FORWARD TO SUMMARY						R 15 000.00

ITEM	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
2		PART 2: REPAIR EROSION GULLEY				
2.1	SANS 1200 D	SECTION: SMALL EARTHWORKS				
	8.3.1	Site Clearance				
	8.3.1.1	Clear and strip site				
2.1.1		(a) Top soil and grass from embankment (20x40)	m ²	800		R -
2.1.2		Backfill erosion gulley at chainage 715m on downstream face with specified material	m ³	1 600		R -
					Total: Part 2	R -
3		PART 3: REINSTATE THE NOC				
3.1	SANS 1200 DM	SECTION: EARTHWORKS (ROADS, SUBGRADE)				
	8.3.2	Preparation of site				
3.1.1		(i) Maximum depth of top soil stripping (200mm) till RL 1066.2 m.	m ³	1 315		R -
3.1.2	8.3.3	Treatment of road bed				
		(a) Road bed preparation and compaction of material to:				
		(2) Minimum of 93% of modified AASHTO maximum density	m ³	1 315		R -
3.1.3	8.3.16	Gravel surface layer (G8 material), 300mm thick compacted to minimum of 93% modified AASHTO maximum density	m ³	1 870		R -
					Total: Part 3	R -
TOTAL CARRIED FOWARD						R -

ITEM	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	CONTRACT AMOUNT
3		PART 3: DRAINAGE WORKS				
3.1	SANS 1200 DB	SECTION: EARTHWORKS (PIPE TRENCHES)				
8.3.1		Site Clearance				
3.1.1		a) Clear vegetation and trees of girth up to 1 m	m	300	R	-
3.1.2		b) Clear trees of girth over 1,0 m and designated obstacles	No.	10	R	-
3.1.3	8.3.2	Excavation			R	-
3.1.4	8.3.2 a)	Excavate trench downstream of the main embankment as detailed on civil drawing 174338/16. Backfill, compact and dispose of surplus material. (Estimate hard excavation)	m ³	900	R	-
3.1.5		Provide excavation support for stabilising side slopes	Sum		R	-
3.2	SANS 1200 L	SECTION: MEDIUM PRESSURE PIELINES				
3.2.1	8.2.1	Supply, lay, and bed Ø160 HDPE slotted drainage pipes complete with coupling	m	150	R	-
3.2.2		Import and place filter sand surrounding HDPE slotted drainage pipe	m ³	90	R	-
3.2.3	8.2.1	Supply, lay and bed Ø150 HDPE pipes complete with coupling	m	750	R	-
3.2.4	8.2.14	Supply and install 7 x Ø1000mm concrete manholes, 2.5m deep, with lid and step irons	No.	7	R	-
3.3	SANS 1200 DB					
3.3.1	8.3.2 a)	Backfill trench with selected in-situ material and dispose of surplus material	m ³	950	R	-
3.4	SANS 1200 LE	SECTION: OUTFALL STRUCTURE				
3.4.1	8.2.7	Supply and install outfall structure as per drawing 174340/16	No.	1	R	-
TOTAL CARRIED FORWARD TO SUMMARY						R 0.00

ITEM	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	CONTRACT AMOUNT
5		PART 5: DAYWORKS				
5.1.1		LABOUR (a) Nett cost of labour	Prov Sum	1	R	110 000.00
5.1.3		PLANT (a) Nett cost of plant (including operator, assistance, fuel, oil, maintenance, etc)	Prov Sum	1	R	200 000.00
5.1.5		MATERIAL (a) Nett cost of material	Prov Sum	1	R	150 000.00
TOTAL CARRIED FORWARD TO SUMMARY						R 460 000.00

MARICO BOSVELD DAM REHABILITATION WORKS

Bill of Quantities summary page



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

SCHEDULE

DESCRIPTION

AMOUNT (R)

1	PART 1: PRELIMINARY AND GENERAL
2	PART 2: REPAIR EROSION GULLEY
3	PART 3: REINSTATE THE NOC
4	PART 4: DRAINAGE WORKS
5	PART 5: DAYWORKS
	TOTAL OF PRICED ITEMS

R	
R	-
R	-
R	
R	460 000.00

Add 5% for CPA and adjustments

SUB-TOTAL A

R	-
---	---

Add 10% for contingencies and additional work

SUB-TOTAL B

R	-
---	---

Add 14% for Value Added Tax (VAT)

TOTAL (Incl. VAT)

R	-
---	---

C2.3: DAYWORK SCHEDULE

This Daywork Schedule shall be used for the valuation of any additional or substituted work which cannot conveniently be valued at the rates and prices submitted in the Bill of Quantities.

In respect of labour and materials used in the additional or substituted work not covered in the Daywork Schedule the Contractor shall be paid the actual cost plus the percentage allowance stated in the Appendix to Tender.

The Tenderer shall quote hereunder rates which shall apply for payment purposes if the Engineer orders additional or substituted work to be carried out on a daywork basis and shall therefore be in accordance with the requirements of Clause 6.5 of the General Conditions of Contract.

1. LABOUR AND MATERIALS

Rates and prices entered in the Schedule shall be held to allow for the gross remuneration of the labour employed and the net cost of materials actually used and shall also include the percentage allowances stated in the Contract Data.

2. PLANT AND EQUIPMENT

The Tenderers shall list all major items of plant and equipment to be used on the works and which may be required for use on dayworks. The proposed hire rates for these items shall be entered against each type of machine, such rates to include for all relevant costs of plant hire inclusive of fuels and lubricants but exclusive of labour charges for the operators which will be paid for under sub-clause (1) above.

The rates for plant items not listed in the schedule will be the ruling plant hire rates, inclusive of fuels and lubricants but exclusive of labour charges for the operators, inclusive of a 7,5% handling charge. It is therefore in the Tenderers interest to ensure that the list is complete.

Should there be insufficient space on the pages provided, the Tenderer shall add further pages as required.

THE RATES FOR THE PLANT AND EQUIPMENT MENTIONED IN THE SCHEDULE SHALL BE FILLED IN FOR THE ITEMS REQUESTED. SHOULD AN ITEM BE OMITTED IT SHALL BE DEEMED TO HAVE BEEN INCLUDED IN THE OTHER DAYWORK RATES.

A. LABOUR

DESIGNATION		RATE	
Welder	per hour		
Carpenters	per hour		
Bricklayers	per hour		
Steel Fixers	per hour		
Pipe layers	per hour		
Gangers	per hour		
Plant Operators	per hour		
Truck Drivers	per hour		
Labour	per hour		

B. MATERIALS

DESIGNATION		RATE	
Cement	per 50kg pocket delivered		
Concrete sand	per m ³ delivered		
Concrete Aggregate	per m ³ delivered		
Reinf. steel, round,	per ton mild delivered		
Reinf. steel, round,	per ton high tensile delivered		
Reinf. steel, fabric	per ton delivered		
Bricks, stock	per 1 000 delivered		
Bricks, face	per 1 000 delivered		

C. TRANSPORT

DESIGNATION	RATE	
Per cubic metre kilometre		

D. PLANT AND EQUIPMENT

CAPACITY/ MASS	DESCRIPTION	NON WORKING RATE *		OPERATING RATE		PER
		R	c	R	c	
	Excavator					
	Crane					
	Flat truck					
	Compressor and track rig					
	LDV					
	Weld set					
	Test pump					
	Grinder					

* Only applicable on authority of the Engineer

SIGNED BY TENDERER.....

PART C3 : SCOPE OF WORK

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C3.1 STANDARDSPECIFICATIONS

Although not included in this document the following standard specifications apply to this contract.

SANS 1200 STANDARDIZED SPECIFICATIONS

- SANS 1200 A - GENERAL
- SANS 1200 AB - ENGINEER'S OFFICE
- SANS 1200 D - EARTHWORKS
- SANS 1200 DB - EARTHWORKS (PIPE TRENCHES)
- SANS 1200 DM - EARTHWORKS (ROADS, SUBGRADE)
- SANS 1200 L - MEDIUM PRESSURE PIPELINES
- SANS 1200 G - CONCRETE (STRUCTURAL)

C3.2 : PROJECT SPECIFICATION

The Project Specification forms an integral part of the contract and supplements the Standard Specifications.

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

C O N T E N T S

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PS-1 PROJECT DESCRIPTION

The project comprises of two main works, namely:

PS-1.1 INSTALLATION OF A SUB-SURFACE DRAIN

These works will include installing a sub-surface drainage system at the downstream toe consisting of:

- Installing slotted HDPE drainage pipes surrounded by a sand filter layer at the downstream toe.
- Installing a drainage canal consisting of unslotted HDPE collector pipes connected to the slotted HDPE drainage pipes channelling the water to the downstream river area.
- Outfall structure at end of drainage canal .

PS-1.2 REINSTATING THE MAIN EMBANKMENT

These works will include:

- Reinstating and re-sloping the Non-Overspill Crest (NOC) to its design height by a combination of backfilling using a material approved by the Employer's Agent and placing a durable G8 surfacing layer.
- Placing distance/chainage markers along the downstream side of the NOC.
- Backfilling an erosion gulley located on the downstream face of the main embankment at chainage 715m.

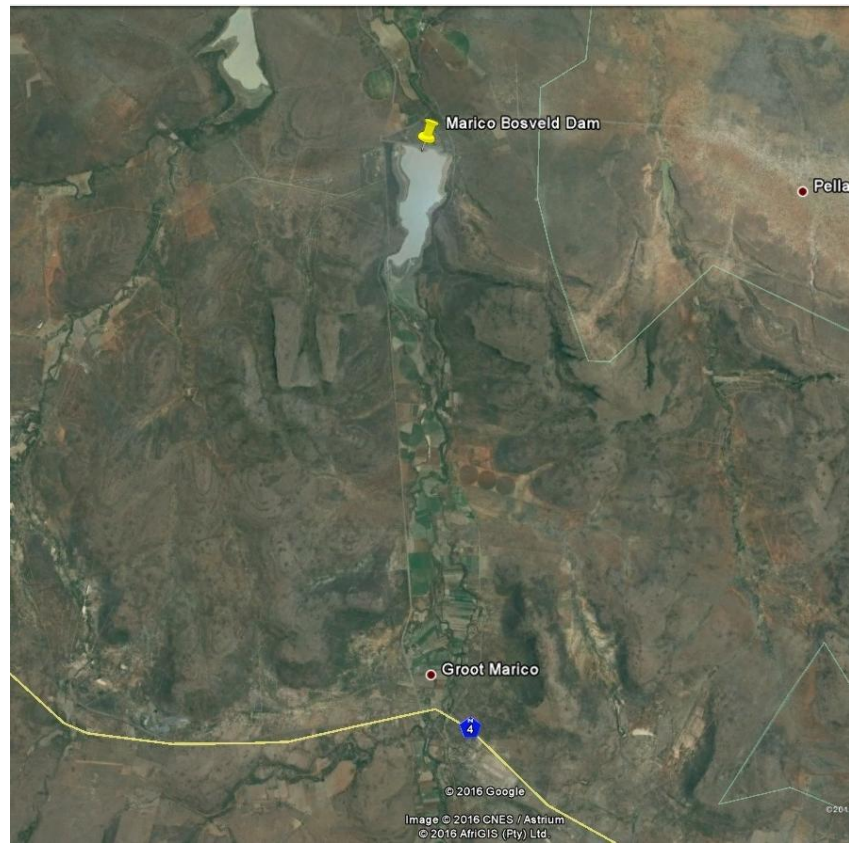
PS-2 LOCALITY AND LOCATION INFORMATION

PS-2.1 GENERAL

Marico Bosveld Dam, also known locally as Riekerts Dam, is an earthfill embankment Dam located on the Groot Marico River. The Dam is situated approximately 15km North from the town of Groot Marico in the North West Province as can be seen in Figure 1. It was designed and constructed by the Department of Water & Sanitation (DWS) and completed in 1933.

The main embankment is 1391m long and is 27m at its highest point above the river bed. A concrete core wall is located within the embankment and has a maximum depth of excavation of 21.8m. The dam spillway is a composite spillway consisting of three sections located on the right flank. A labyrinth spillway forms the primary

spillway, with an arch & trough spillway and auxiliary spillway acting as secondary spillways on the right flank



**Figure 1: Plan view of Marico Bosveld Dam relative to the town of Groot Marico
(Google Earth 2013)**

Access to the construction areas can be gained using either the road on the NOC or a gravel road (downstream berm) along the downstream toe of the dam as indicated by the yellow line in Figure 2.



Figure 2: Plan view of Marico Bosveld Dam embankment and spillway (Google 2013)

The contractor shall be required to increase the width of the access road wherever he considers necessary for the safe operation of construction vehicles. The contractor shall also be responsible for maintaining the road and side drainage throughout the duration of the contract. Care should be exercised when using the NOC as an access road as heavy machinery should not use the crest as access to construction areas.

The following individuals can be contacted with regards to access to the dam site:

1. Martin Lamprecht (DWS: Northern Operations)
Cell 082 8004557
2. Eben Terblanche (DWS: Northern Operations)
Cell 0605717549

PS-3**OVERVIEW AND DETAILS OF CONTRACT**

The work to be executed under this contract consists mainly of the following:

PS-3.1**SITE ESTABLISHMENT, MAINTENANCE AND CLEARANCE**

- Contractor's establishment on site
- Maintenance and establishment during contract period.
- Removal of all equipment, plant, surplus material, housing, facilities and clearing of site upon completion of work.

PS-3.2**INSTALLATION OF A SUB-SURFACE DRAIN**

The Contractor shall be responsible for all the works related to the installation of the downstream drainage works at the dam with reference to the civil drawings 174 338/16, 174 339/16, 174 340/16 attached to this document in Section C.3.5.

- At the area specified in drawing 174 338/16, excavate a trench and supply and lay a sub-surface drain as detailed in civil drawing 174 339/16. The sub-surface toe-drain consists of three parallel slotted HPDE pipes (Slotted over two thirds around the apex and a flow channel at the bottom third of the pipe). Place an adequate surrounding sand filter layer according to the grading criteria and backfill above filter layer as approved by the Employer's Agent (also referred to as the Engineer on the civil drawings) on-site.
- Install concrete manholes along the new sub-surface drain, at positions as indicated in drawing 174 338/16.
- Ensure adequate drainage to downstream area by connecting the sub-surface drain to a drainage canal. The drainage canal must be constructed by excavating a trench to the downstream area indicated on drawing 174 338/16. Place three parallel sub-surface HDPE pipes (not slotted) within the trench and backfill selected earthfill material as indicated in civil drawing 174340/16.
- Place a reinforced concrete outfall structure at the end of the drainage canal.
- It should be noted that the area in which the sub-surface drainage system will be installed is highly saturated. The contractor should therefore cater for the installation of the sub-surface drainage system in wet conditions in the tendered price.

PS-3.3**REINSTATING THE MAIN EMBANKMENT**

The contractor shall be responsible for all works related to the reinstatement of the NOC at the dam with reference to drawing 174 341/16 attached to this document in Section C.3.5.

- The crest of the NOC must be prepared by removing a 200mm top layer and levelling the surface till a level of RL 1066.3 m. A 300mm G8 surfacing layer must then be placed till a design height of 1066.6 m.
- The NOC must be sloped toward the upstream face as to prevent rain water flowing down the downstream slope.

- Suitable distance / chainage markers as approved by the Employer's Agent (also referred to as the Engineer on the civil drawings) must be installed at 100m intervals on the downstream side of the NOC to make sure they are visible from the downstream toe as well.
- An erosion gulley which has formed on the downstream slope at chainage 715m must be sufficiently backfilled and sloped to the design slope (1.9 Hor : 1 Vert) of the downstream face of the main embankment.

PS-4 CONSTRUCTION AND MANAGEMENT REQUIREMENTS

PS-4.1 General

The Contractor shall include with his tender a preliminary programme in the prescribed form. The programme shall be in the form of a Gantt chart with sufficient details to show clearly how will works be performed within the time for completion as stated in the contract Data.

The Contractor is referred to SANS 1921:2004: Construction and Management Requirements for Works Contracts, Part 1: General Engineering and Construction Works. These specifications shall be applicable to the contract under consideration and contractor shall comply with requirements relevant to the project.

Certain aspects however require further attention as described hereafter.

PS-4.2 Quality Assurance (QA)

(Read with SANS 1921 – 1: 2004 clause 4.4)

The Contractor will be solely responsible for the production of work that complies with the specifications to satisfaction of the Engineer. To this end it will be the full responsibility of the contractor to institute an appropriate Quality Assurance (QA) system on site. The Engineer will Audit the contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure.

The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment and tools are available to control the quality of his workmanship in accordance with his QA-system. His attention is drawn the fact

that it is not duty of the Engineer or Engineer's representative to act as foreman or surveyor.

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

PS-4.3 Management and Disposal of Water

(Read with SANS 1921 – 1: 2004 clause 4.6)

The Contractor shall pay special attention to the management and disposal of water and storm water on the site. It is essential that all completed works or parts thereof are kept dry and properly drained. Claims for delay and repair of damage caused to the works as results of Contractor's failure to properly manage rain and surface water, will not be considered.

PS-4.4 Disposal of spoil or surplus material

(Read with SANS 1921 – 1: 2004 clause 4.10)

The Contractor shall dispose all surplus and unsuitable material in legal spoil areas of his own choice. He shall be responsible for all arrangements necessary to obtain such spoil sites.

PS-4.5 Testing

(Read with SANS 1921 – 1: 2004 clause 4.11)

PS-4.5.1 Process control

The Contractor shall arrange for all tests required for process control to be done by a laboratory acceptable to and approved by the Engineer.

The Contractor may establish his own laboratory on site or he may employ the services of an independent commercial laboratory. Whatever method is used, the Contractor must submit the results of the tests carried out on material and workmanship when submitting work for acceptance by the Engineer. The costs for these tests shall be deemed to be included in the relevant rates and no additional payment will be made for testing as required.

PS-4.5.2 Acceptance control

The process control test results submitted by the contractor for approval of materials and workmanship may be used by the Engineer for acceptance control. However, before accepting any work, the Engineer may have further control tests carried out by a laboratory of his choice. The cost of such additional tests will be covered by a provisional sum provided in the Bill of Quantities, but tests that failed to confirm compliance with the specifications, will be for the account of the Contractor.

PS-4.6 **Survey beacons**

(Read with SANS 1921 – 1: 2004 clause 4.15)

The Contractor shall take special precautions to protect all permanent survey beacons or pegs such as bench-marks, stand boundary pegs and trigonometrical beacons, regardless whether such beacons or pegs were placed before or during the execution of the contract. If any such beacons or pegs have been disturbed by the contractor or his employees, the Contractor shall have them replaced by registered land surveyor at his own cost.

PS-4.7 **Existing Services**

(Read with SANS 1921 – 1: 2004 clause 4.17)

PS-4.7.1 **Water, Electricity and Sewerage**

The Contractor shall, at his own expenses, be responsible for obtaining and distributing water and electricity required for construction and domestic use. The distribution of water and electricity shall be carried out in accordance with the applicable laws and regulations.

No separate payment will be made for obtaining and distributing water and electricity, the cost of which will be deemed to be included in the tendered rates.

PS-4.7.1 **Buried Services - General**

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

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

PS-4.8 Management of the environment

(Read with SANS 1921 – 1: 2004 clause 4.19)

The Contractor shall pay special attention to the following:

(a) Natural Vegetation

The Contractor shall confine his operation to as small an area of site as may be practical for the purpose of constructing the works.

Only those trees and shrubs directly affected by the works and such others as Engineer may direct in writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

(b) Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

PS-4.9 Overhaul

No payment will be made for overhaul on this contract unless provision is made thereof in specific items.

PS-4.10 Security

The Contractor shall provide security watchmen for the contract as he deems fit at no extra cost for the employer. The Contractor must ensure all his employees as well as the employees of the subcontractors are able to identify themselves as members of the construction team.

PS-5 CONSTRUCTION PROGRAMME

PS-5.1 Preliminary programme

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions and special non-working days as specified in the special Conditions of Contract, in the Project Specifications and in the contract.

PS-6 SITE FACILITIES AVAILABLE

(Read with SANS 1921 - 1: 2004 clause 4.14)

PS-6.1 Contractor's camp site and depot

The Contractor is responsible to provide a suitable site for his camp and to provide accommodation for his personnel and labourers. If the Employer can make any specific site available to the Contractor, such site will be pointed out to the Contractor.

Tenderers shall include a Method Statement with a map in their tenders to indicate the proposed layout of the contractor's facilities. This shall include the type of facilities to be erected.

PS-6.2 Accommodation of Employees

No housing is available for the Contractor's employees and the contractor shall make his own arrangements to house his employees and to transport them to site.

No informal housing or squatting on-site will be allowed.

The Contractor shall provide the necessary ablution facilities at his camp site and the site of works for the use of his employees. Chemical toilets will only be allowed where temporary facilities have to be provided.

PS-6.3 Power supply, water and other services

PS-6.3.1 General

The Contractor shall make his own arrangements concerning the supply of electricity power, water and all other services. No direct payment will be made for the provision of electricity, water and other services. The cost thereof shall be deemed to be

included in the rates and amounts tendered for the various items of work for which these services are required, or in the Contractor's preliminary and general items as the case may be.

PS-6.3.2 Water and Electricity

Water and electricity will be available to the contractor. The Contractor will be responsible for all connections and payments required for the use of water and electricity. If the available water and electricity is not sufficient, the Contractor must bring this to the attention of the Engineer as soon as possible.

PS-6.3.3 Sanitation at the Contractors facilities

There is no sewer treatment system on site and Tenderers shall provide for chemical toilets in their rates.

PS-6.3.4 Refuse Removal

Tenderers shall allow in their rates for collection and removal of waste to an approved landfill site.

PS-6.3.5 Kitchen and Mess Facility labour

Tenderers shall include in their Rates for provision of a kitchen and Mess Facility at the Labour Compound to avoid cooking, open fires and litters on site.

PS-7 SITE FACILITIES REQUIRED

The Contractor shall provide for the use of the Engineer, maintain and service, as applicable, the facilities as specified in SANS 1200 A and SANS AB as modified by Clause PS A and PS AB included in section C3.3 of this document.

In addition the Contractor shall provide the following:

- Additional tests as ordered by the Engineer (see PSA4.2)
- A conference room shall also be provided by the contractor with the same furnishings as specified in items (a) - (n) of PSAB 3.2 and the following:
 - 10 x strong chairs
 - 2 x 15A power sockets

PS-8**OCCUPATIONAL HEALTH AND SAFETY**

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act 181 of 1993 and the Construction Regulations in Government Notice R.84 of 7 February 2014 by the Department of Labour. The site specific Health and Safety Specification is included in **PS OSHA** (attached in Appendix B of this document). The contractor shall comply with the site specific Health & Safety Specification and Annexure A, B & C for other requirements, contractors submissions and Baseline Risk Assessments. The contractor shall make provision for the requirements in his tender price.

PS-9**ADVERSE WEATHER CONDITIONS**

For the purpose of this contract "abnormal climatic conditions" is defined as conditions such as excessive rainfall that may disrupt and delay the work beyond the control of the Contractor, and which could reasonably lead to a claim for extension of time.

The Contractor shall make provision in his programme and tendered rates and prices for normal delays that may be caused by normal weather conditions.

The formula below shall be used to calculate separately the delay for each calendar month or part thereof. It shall be calculated each month during the period referred to in the general conditions of contract as the time for completion of the works (including any extension thereof that may have been granted), or until the issue date of the certificate of practical completion, whichever is the shorter period. The delay calculated for a given month shall be used to determine the interim extension of the time granted for that month. At the end of the applicable period referred to above, the aggregate of the monthly delays will be taken into account for the final determination of the total extension of time for the contract:

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

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

The delay for a part of a month shall be calculated by substituting pro rata values for the variables in the equation.

The symbols shall have the following meanings;

V = Delay due to rain in calendar days in respect of the calendar month under consideration.

Nw = Actual number of days during the calendar month on which a rainfall of Y mm or more per day has been recorded.

Rw = Actual rainfall in mm for the calendar month under consideration.

Nn = average number of days in the relevant calendar month (as derived from existing rainfall records provided in table hereafter) on which a rainfall of Y mm or more per day has been recorded.

Rn = Average rainfall in mm for the calendar month, as derived from the rainfall records supplied in the project specifications.

X = 20

Y = 10

The total delay that will be taken into account for the determination of the total extension of time for the contract shall be the algebraic sum of the monthly totals for the period under consideration. But if the grand total is negative, the time for completion shall not be reduced on account of abnormal rainfall. The total extension of time for any calendar month shall not exceed $(N_c - N_n)$ calendar days, where N_c = number of calendar days in the month under consideration.

The factor $(N_w - N_n)$ shall be considered to represent a fair allowance for variations from the average number of days during which rainfall equals or exceeds Y mm per day.

The factor $(R_w - R_n) / X$ shall be considered to represent a fair allowance for variations from average for the number of days during which rainfall does not equal or exceed Y mm per day, but when wet conditions prevent or disrupt work.

This formula does not take into account any flood damage, which could cause further or concurrent delays and which should be treated separately in so far as extension of time is concerned.

Accurate rain gauging shall be taken at a suitable point on site daily at 8:00 unless otherwise agreed to by the Engineer and the Contractor shall, at his own expense,

take all necessary precautions to ensure that the rain gauges cannot be interfered with by unauthorized persons.

Delays due to abnormal climatic conditions, which the contractor may claim as extension of time, must be determined when such conditions occur and must be recorded on a monthly basis.

The following should be noted with regards to the weather patterns and operations of Marico Bosveld Dam:

- The dam experiences its rainy season during summer. This period usually starts in November and lasts till end of March with February usually experiencing the highest rainfall for the year.
- The peak service time of the dam is between September and March.
- Water is extracted from the dam throughout the year.

Refer to table below for monthly rainfall statistics.

Average Monthly Rainfall Statistics		
Month	Rn (mm)	Nn (days)
January	109.20	3
February	90.51	2
March	80.91	2
April	46.15	1
May	15.04	0
June	9.10	0
July	3.80	0
August	4.78	0
September	16.54	0
October	44.75	1
November	79.77	3
December	92.69	3
Total	593	16

PS-10

AS-BUILT DRAWINGS AND RECORD DRAWINGS

During the execution of the Works on the Site the Contractor shall, in a manner approved by the Employer's Agent (Engineer), record on Working Drawings and Contract Drawings all information necessary for preparing As-built Drawings of the installed Contract Works Drawings before a Certificate of Completion will be issued. Marked up Drawings and other documents shall be made available to the Employer's Agent (Engineer) as he may require for inspection and checking.

C3.3: AMENDMENTS TO THE STANDARD SPECIFICATIONS

The following variations and additions to the SANS 1200 Standardised Specifications will be valid for the contract. The prefix “PSA” indicates an amendment to SANS 1200A, “PSC” to SANS 1200C, etc.

C O N T E N T S

PSA - SANS 1200 A: General	C3.21
PSAB- SANS 1200 AB: Engineer’s Office.....	C3.29
PSD - SANS 1200 D: Earthworks	C3.31
PSDB- SANS 1200 DB: Earthworks (Pipe trenches)	C3.32

PSA **GENERAL** (SANS 1200 A)

PSA-2 **Interpretations**

PSA-2.2 **Applicable edition of standards**

Add at the beginning:

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

PSA-2.3 **Definitions**

Except for references to the Bureau itself, and to the (official) SABS mark, the term "SABS" shall mean "SANS".

The terms "Schedule of Quantities" and "Bill of Quantities" shall mean the same.

The term "Project Specification" shall mean that portion of Part C3: Scope of Work that describes the project and or amends the standardized and standard specifications.

The term "tender" shall refer to the contract signed between the Employer and Contractor included in this document.

The term "tendered rate" shall refer to the rates submitted in the Bill of Quantities

Add the following definitions:

"General Conditions: The General Conditions of Contract specified for use with this Contract and the Special Conditions of Contract as applicable.

Specified: As specified in the Standardized Specifications, the Drawings or the Project Specifications.

c. Measurement and Payment:

Replace the definitions for fixed charge, time related charge and value related charge with the following:

"Fixed charge: A charge that is not subject to adjustment on account of variation in the value of the Contract amount or the Contract time of completion.

Time related charge: A charge, the amount of which is varied in accordance with the time for completion of the work as adjusted in accordance with the provisions of the Contract.

Value related charge: A charge, the amount of which is varied pro rata the final value of the measured work executed and valued in accordance with the provisions of the Contract."

PSA-2.8 Items in Schedule of Quantities

PSA-2.8.1 Principle

In the fourth line, after the word "specification", add: "or in the measurement and payment clause of the standard specification, particular specification or project specification".

Add the following paragraphs:

"The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself before submitting his rates for approval by the Engineer (as far as is practicable) as to

- (a) the form and nature of the Site and its surroundings, including subsurface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of work and materials necessary for the execution and completion of the Works,
- (d) the means of access to the Site and the accommodation he may require

and, in general, shall be deemed to have obtained all information (as far as is practicable) as to risks, contingencies and all other circumstances which may influence or affect his submitted rates.

The Contractor shall be deemed to have based his submitted rates on the technical data given in the Documents and, if in the performance of the Contract any circumstances shall differ from the said technical data, which difference causes delay or additional Cost, the Contractor shall be entitled to make a claim in accordance with Sub-clause 20.1 of the Conditions of Contract.

The Contractor shall be deemed to have satisfied himself before entering into a contract with the Employer as to the correctness and sufficiency of the information contained in the contract for the Works and of the rates and prices stated in the priced Bill of Quantities and the Schedule of Rates and Prices (if any) or in the specification, which rates and prices shall (except in so far as otherwise provided in the Contract) collectively cover full payment for the discharge of all his obligations under the Contract and all matters and things necessary for the proper completion of the Works."

PSA-3 MATERIALS

PSA-3.1 Quality

Add the following:

The Contractor is responsible for the cost of all testing to ascertain that the materials do comply with the specified minimum requirements of the relevant standards and no additional payment will be made for such testing.

The Contractor shall inform the Engineer of any control testing to be done at least 48 hours before such tests are required and must allow in his program for the time necessary for the tests and the processing of the results thereof.

PSA-4 Plant

PSA-4.2 Contractor's Office, Stores and Services

Add the following before the first paragraph:

"The Contractor's construction camp shall be fenced off and shall contain all offices, stores, workshops; pipe yard(s) toilet facilities, etc. The camp shall always be kept in a neat and tidy condition.

No personnel will be allowed to reside on the Site. The Contractor shall be responsible for the security of his construction camp and of the construction Site, at his own cost. Only night-watchmen may be on the Site after hours.”

The Contractor shall provide and maintain on the Site adequate and suitable sanitary and first aid services and a supply of potable water for his employees engaged on the Contract.

The suitable sanitary services shall be of the bucket or chemical type and shall be readily accessible to workers at all areas of the site.

The Contractor shall make all the necessary arrangements with the relevant local authority or commercial organisation for the disposal of the contents of the toilets on a regular basis.

Add the following:

It is not a requirement of this contract for the Contractor to provide an approved field laboratory on site, although he may elect to do so. If no laboratory is provided, the Contractor shall nevertheless arrange to have the required quality control tests (e.g. densities, concrete strengths, etc.) performed by an approved commercial laboratory. The tenderer's tendered rates shall include full compensation for such tests.

PSA-5 Construction

PSA-5.1 Survey

PSA-5.1.1 Setting out of the Works

Before commencing any construction, the Contractor shall check the relative positions and levels of all reference pegs, bench marks and line pegs and inform the Engineer of any discrepancy.

The Engineer may alter any part of the works to suit local conditions. The Contractor must therefore confirm with the Engineer the preliminary setting out of any part of the works before proceeding with detail setting out, or construction. Only after the Engineer has approved a specific site or part of the works, may the detail setting out and construction commence.

The checking of any setting-out or of any line or level by the Engineer shall not relieve the Contractor of his responsibility for the correctness thereof.

Setting out of the works will not be measured and paid for separately, and compensation for the work involved in setting out shall be deemed to be covered by the tendered rates of other items included under the Contract.

PSA-5.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS

Add the following:

"The Contractor shall, in connection with the Works, provide and maintain all signs signboards, lights, barriers, barricades, fencing and watching when and where

- (a) specified in or reasonably to be inferred from the Contract, or
- (b) required by any competent statutory or other authority, or
- (c) required by the Engineer for the protection of the Works or for the safety or convenience of the public or others;

provided that, if the Engineer shall instruct the Contractor to provide any sign, signboard, light, barrier, barricade, fencing or watching not included in paragraphs (a), (b) or (c), such requirement shall constitute a variation by the Engineer in terms of Clause 13 of the Conditions of Contract".

PSA-5.8 GROUND AND ACCESS TO WORKS

Add the following:

On completion of operations the Contractor shall restore the ground surface, wherever it may have been disturbed, to its original condition by filling in all ruts with material similar to the material within the rut and levelling the ground and, where necessary, planting grass and shrubs as may be required. Any boundary fences which have been removed or damaged by his operations and activities shall be repaired and/or reinstated at the Contractor's expense.

PSA-8 Measurement and payment

PSA-8.1 MEASUREMENT

PSA-8.1.1 Method of measurement, ALL sections of the schedule

In the second line after the words "standardized specification or in"

Add the following:

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

PSA-8.2 PAYMENT

PSA-8.2.2 Time-related items

Notwithstanding the stipulation of Sub-clause 8.2.2, an approved extension of time will only entitle the Contractor to payment for time related items in the Schedule of Quantities on the basis of the Time for Completion of the Works stated in the Offer and Acceptance.

PSA-8.3 SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS

PSA-8.3.2 Establishment of facilities on site

PSA-8.3.2.1 Facilities for the Engineer

Amend the following items:

Remove:

(b) Telephone

Unit : Sum

Add:

(b) Nameboards

Unit : Sum

(c) Provision of computer equipment:

Unit : Sum

- A wireless network including modem and router (min 1Mbit/second);

- One multifunction document solution machine with capabilities to copy and scan documents up to A3 in size.

The sum tendered shall allow for the Contractor to provide offices and facilities as specified in PSAB sub-clause 3.2.

PSA-8.3.2.2 Facilities for the Contractor

Add the following:

- (k) Security of the works
- (l) Testing facilities as per PSA-4.2

All items scheduled in clause 8.3.2.2 are consolidated into one item and payment under item PS-8.3.2.2 will cover items (a) to (l).

PSA-8.4 SCHEDULED TIME-RELATED ITEMS

PSA-8.4.2 Operation and maintenance of facilities on site

PSA-8.4.2.1 Facilities for the Engineer

Amend the following items:

Remove:

(b) Telephone Unit : Sum

Add:

(b) Nameboards Unit : Sum

(c) Provision of computer equipment: Unit : Sum

- A wireless network including modem and router (min 1Mb its/second);
- One multifunction document solution machine with capabilities to copy and scan documents up to A3 in size.

(d) Survey assistant and equipment Unit : Sum

(e) Carports Unit: Sum

The sum tendered shall allow for the Contractor to provide offices and facilities as specified in PSAB sub-clause 3.2.

PSA-8.4.2.2 Facilities for the Contractor

Add the following:

- (k) Security of the works
- (l) Testing facilities as per PSA-4.2

All items scheduled in clause 8.4.2.2 are consolidated into one item and payment under item PSA-8.4.2.2 will cover items (a) to (l).

PSA-8.7 DAYWORK

Provisional items for Daywork are scheduled for:

- a) Labour
- b) Material
- c) Contractor's own plant and equipment
- d) Hired plant and equipment

Payment will be made as specified in C2.3: Daywork Schedule using the Contractor's tendered rates contained therein.

PSAB ENGINEER'S OFFICE (SANS 1200 AB)

PSAB-3 Materials

PSAB-3.1 Name boards

Delete: "The standard board of the South African Institution of Civil Engineers" and replace with the standard name board of the Department of Water and Sanitation.

One name board, manufactured as specified in Sub-clause 3.1, shall be provided, and shall be erected, plumb and level, in position as directed by the Engineer.

The wording for the Name boards shall be as ordered at the commencement of the Works.

PSAB-3.2 Office building(s)

In addition to the furnishings specified in Sub-clause 3.2, add the following:

"The Contractor shall provide an office and a conference room for the use of the Engineer and his staff that shall be situated within the security area enclosing the Contractor's camp.

Amend (j) and add (k)-(n):

j) Acceptable air-conditioning unit

k) Two 220V 15A wall socket with computer extension sockets (1 to 4 type).

l) Kettle

m) A wireless network including modem and router (min 1Mb its/second)

n) One multifunction document solution machine with capabilities to copy and scan documents up to A3 in size.

PSAB-3.3 Protective clothing

The Contractor shall provide and replace when necessary safety helmets, high visibility safety vests, and rubber wellington boots (of sizes as required) to members of the Engineer's site staff and his visitors.

PSAB-4 Plant

PSAB-4.1 Telephone

A land-line telephone will not be required for the Engineer.

PSAB-4.2 Parking facilities

A lean-to carport for two cars, giving protection from the sun, wind and rain, and with a ground surface that is neither dusty nor muddy, shall be provided in a position adjacent to the Engineer's office for the exclusive use of the Engineer.

PSAB-5 Construction

PSAB-5.3 Key personnel

The Contractor shall inform the Engineer of the person whom he has charged with the duties with respect to the Site in terms of the Occupational Health and Safety Act and the person(s) who are in possession of a valid certificate of competency in first aid. The Contractor shall give copies of the minutes of the site safety meetings to the Engineer.

PSAB-5.5 Survey assistants

The Engineer's Representative will occasionally need the assistance of a labourer to help with testing, survey, etc. The Contractor shall supply the certified and calibrated survey equipment and staff.

All equipment may be shared by arrangement between the Contractor and the Engineer's representative. The Contractor shall insure the equipment against any loss, damage or theft and he shall indemnify the Engineer against any claims in this regard.

Payment for survey equipment will be on a monthly basis as a time-related item under item 8.4.2.1 of SANS 1200A.

PS D EARTHWORKS

PSD-5 Construction

PSD-5.2 Methods and Procedures

PSD-5.2.5 Transport for Earthworks

PSD-5.2.5.1 Freehaul

Add the following:

For this contract all haul will be regarded as free haul and the cost of transportation of all materials will be deemed to be included in the rates and prices tendered in the BOQ.

PSD-5.2.6 Inspection of Excavations

All foundations for structures shall be inspected by the Engineer and/or Engineering Geologist before any backfilling with material or concrete of any kind is commenced. The Engineer shall be given at least two days notice by the Contractor for the necessary arrangements to be made.

PSD-7 Testing

PSD-7.2 Taking and testing of samples

It is not a requirement of this contract for the Contractor to provide an approved field laboratory on site, although he may elect to do so. If no laboratory is provided, the Contractor shall nevertheless arrange to have the required quality control tests (e.g. densities, concrete strengths, etc.) performed by an approved commercial laboratory. The tenderer's tendered rates shall include full compensation for such tests.

The Contractor is responsible for his own process and quality control and shall therefore have all necessary tests carried out by the laboratory to ensure that the material and quality of work conform to the requirements specified.

The results of all such test and the positions where the samples were taken must be submitted to the Engineer. The number and positions of tests shall be adequate to prove to the Engineer that the works as a whole comply with the requirements.

The Engineer may have additional or acceptance control tests carried out by the independent laboratory and he will make the results available to the Contractor.

PSDB-6 EARTHWORKS (PIPE TRENCHES) (SANS 1200 DB)

PSDB-3 Materials

PSDB-3.7 Selection

Replace the words "if he so wishes" in the first line of the second paragraph with the words "must use selective methods to conserve suitable bedding and backfill material."

PSDB-4.0 Plant

PSDB-4.1 Excavation Equipment

Delete this sub clause and replace it with the following:

"For excavation other than hand excavation, the Contractor shall use trenching equipment that is capable of excavating the required trenches within the limits of the maximum and minimum base widths specified. The Contractor may only excavate a trench to a greater base width than the maximum specified if the Engineer shall have given his written approval to such an increase in the base width and if the Contractor shall further take all measures deemed by the Engineer to be necessary to strengthen the pipeline concerned."

PSDB-5.0 Construction

PSDB-5.1.2.1 Precautions

Delete the words "and seepage" from the last line and replace with the following:

"Seepage, or from any other source."

Where a trench crosses or runs adjacent to a stream or watercourse, the Contractor shall take all measures necessary to prevent the entry of water into the trench, and shall design and construct any temporary embankments, diversion channel or overpass. The proposed plan of the dewatering system shall be submitted to the Engineer for approval prior to the installation of the system. Any water, including seepage, entering the trench shall be removed immediately by the Contractor. If required by the Engineer, the Contractor shall leave unexcavated blocks at least 1 m thick and not more than 100 m apart in the trench to prevent the flow of stormwater

down the trench. The unit rate for excavation shall cover all costs of stormwater diversion and protection, and for dewatering."

PSDB-5.6 Backfilling

PSDB-5.6.3 Disposal of Soft Excavation Material

Delete the sentence from "shall" in the second line to the end of the clause, and replace with the following:

"shall be disposed of in areas indicated on the Project Drawing or as directed by the Engineer. Disposal within the area of the works shall be regarded as disposal within the freehaul distance".

PSDB-5.6.4 Disposal of Intermediate and Hard Rock Materials

Clause 5.6.4 amended to include:

"All surplus hard rock, intermediate material and boulders from the trench excavation shall be disposed of in areas approved by the Engineer."

PSDB-5.6.6 Completion of Backfill

Clause 5.6.6 is amended to include:

"The Contractor shall bring on to the site sufficient resources for pipe laying so that trenches do not remain open for longer than two days ahead of the pipe laying team."

and

"The Contractor shall meet all costs of operation ordered by the Engineer to remedy defects in the trenches caused by lengthy exposure."

PSDB-8.0 Measurement and Payment

PSDB-8.3 Scheduled Items

PSDB-8.3.2 Excavation

Add to end of sub clause 8.3.2 (a):

"The rates shall be deemed to include the additional excavation required for manholes, etc. in soft material. Payment for the additional excavation in hard material shall be included in the "Extra Over" items scheduled for trenching.

Volumes of hard rock materials shall be computed from the plan area of the manhole, kerb inlet, etc, plus a side allowance of 600 mm and the depth of the hard rock material to the underside of the slab, less any volume already measured under trench excavation.

C3.4 PARTICULAR SPECIFICATIONS

In addition to the Standard and Project Specifications the following Particular Specifications shall apply to this contract.

C O N T E N T S

ENVIRONMENTAL MANAGEMENT PLAN.....	C3.34
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ENVIRONMENTAL MANAGEMENT PLAN

EMP-1 INTRODUCTION

The Environmental Management Plan (EMP) for the maintenance of Marico Bosveld dam is in the process of being approved and will be included in **PS EMP** in **Appendix A**. The Contractor shall implement the approved EMP for the maintenance of Marico Bosveld Dam.

EMP 2 PAYMENT

The cost for the Contractor to implement the environmental management measures shall be deemed to be included in the Tenderer's rates and prices for Preliminary and General Items and other relevant items in the Bill of Quantities.

No special items will be scheduled for the implementation of the environmental management plan.

C3.5 DRAWING LIST

The drawings issued to tenders as part of the tender documents must be regarded as provisional and preliminary for the tenderer's benefit to generally assess the scope of work.

The work shall be carried out in accordance with the latest available revision of the drawings approved for construction (AFC)

At commencement of the contract, the Engineer shall deliver to the Contractor copies of the AFC drawings and any instructions required for the commencement of the works. From time to time thereafter during the progress of the works, the Engineer may issue further drawings for construction purposes as may be necessary for adequate construction, completion and defects correction of the works.

All drawings and specifications and copies thereof remain the property of the Employer, and the Contractor shall return all drawings and copies thereof to the Employer at the completion of the contract.

REG. No.	Description	Status
1 – GENERAL LAYOUT		
174 335/16	CONSTRUCTION AREA	TENDER
174 336/16	MAIN EMBANKMENT AND DOWSNTREAM AREA	TENDER
174 337/16	PLAN VIEW OF PROPOSED SUB-SURFACE DRAIN	TENDER
174 338/16	CONTOUR SURVEY OF SUB-SURFACE DRAINAGE AREA	TENDER
2 –DRAINAGE WORKS		
174 339/16	SUB-SURFACE DRAIN DESIGNS	TENDER
174 340/16	SUB-SURFACE DRAINAGE CANAL AND OUTFALL STRUCTURE	TENDER
3 - EARTHWORKS		
174 341/16	REINSTATEMENT OF NON-OVERSPILL CREST	TENDER

NOTES:

1. *Civil drawings for tender purposes*

APPENDIX A

PS EMP ENVIRONMENTAL MANAGEMENT PLAN

APPENDIX B

PS OSHA OCCUPATIONAL HEALTH AND SAFETY