



The Contract

APPOINTMENT OF A SERVICE PROVIDER FOR SITING, DRILLING, YIELD TESTING, WATER QUALITY TESTING, EQUIPPING AND COMMISSIONING OF A BOREHOLE WATER INFRASTRUCTURE WITHIN THE PORT ST JOHNS LOCAL MUNICIPALITY WITHIN OR TAMBO DISTRICT MUNICIPALITY IN THE EASTERN CAPE PROVINCE – TEKWINI BOREHOLE

Reference no.: RFQ/MISA/599

Based on

General Conditions of Contract (2015)

Requirement CIDB Grade **2CE**

Bidders are requested to send their quotations to the following email:
khuliso.lieba@misa.gov.za

Closing date : 23 February 2024 @ 11am

Queries: 012 8485300/ khuliso.lieba@misa.gov.za



Reference no.: RFQ/MISA/599

**APPOINTMENT OF A SERVICE PROVIDER FOR SITING, DRILLING, YIELD TESTING,
WATER QUALITY TESTING, EQUIPPING AND COMMISSIONING OF A BOREHOLE
WATER INFRASTRUCTURE WITHIN THE PORT ST JOHNS LOCAL MUNICIPALITY
WITHIN OR TAMBO DISTRICT MUNICIPALITY IN THE EASTERN CAPE PROVINCE –
TEKWINI BOREHOLE**

C1 Agreements and contract data

C1.1 Form of offer and acceptance

Offer

The *Employer*, identified in the Acceptance signature block, has solicited offers to enter into a contract for the provision of services as described in Part 1 of the Contract Data.

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

By the representative of the tenderer, deemed to be duly 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 VAT AND EXPENSES,
calculated in accordance with the *conditions of contract as detailed hereunder*:**

Total Amount:.....(in figures),(in words)

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 including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the conditions of contract identified in the Contract Data.

Capacity

For the
tenderer:

*(Insert name and address of
organisation)*

Name &
signature
of witness

Date

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 Consultant 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 Form of Offer and Acceptance)

Part C2 Pricing Data

Part C3 Scope of Work

Part C4 Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable 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 Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of 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 securities, 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 working days of the date of such receipt notifies the *Employer* in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature	_____	Date:	_____
Name(s)	Ms M. Kgomo		
Capacity For the Employer	Acting Chief Executive Officer Municipal Infrastructure Support Agent		

Schedule of Deviations

1 Subject: Start and completion dates

Details. The commencement date of the contract is 14 days after receipt of the award letter, which must be recorded by the parties. The completion date is estimated to be 6 months from the start date.

2 Subject: Programme of Implementation

Details. The implementation programme as developed by the service provider and approved by the Employer forms an integral part of the parties' agreement.

3 Subject

Details

.....

.....

.....

4 Subject

Details

.....

.....

.....

5 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 returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the *Tenderer* and the *Employer* during this process of offer and acceptance.

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

Letaba House, Riverside Office Park, 1303 Heuwel Avenue, Centurion, 0046
Private Bag X105, Centurion, 0046 Tel: 012-848 5300

Reference no.: RFQ/MISA/599

**APPOINTMENT OF A SERVICE PROVIDER FOR SITING, DRILLING, YIELD TESTING,
WATER QUALITY TESTING, EQUIPPING AND COMMISSIONING OF A BOREHOLE
WATER INFRASTRUCTURE WITHIN THE PORT ST JOHNS LOCAL MUNICIPALITY
WITHIN OR TAMBO DISTRICT MUNICIPALITY IN THE EASTERN CAPE PROVINCE –
TEKWINI BOREHOLE**

C1.2 Contract data

The Conditions of Contract are the General Conditions of Contract (April 2015 edition) published by the SAICE

Part one - Data provided by the *Employer*

Clause	Data	
1 General		
1.1.1.15	<i>The Employer is</i> Physical Address:	Municipal Infrastructure Services Agent Letaba House, Riverside Office Park 1303 Heuwel Avenue, Centurion, Pretoria 0046
	Postal Address:	Private Bag X105, Centurion 0046
	Telephone:	012 848 5300
1.1.1.16	<i>The Employer's Agent is</i> Municipal and Sectoral Technical Support (MSTS) represented by Sector Programme Manager: Water and Sanitation Physical Address:	Letaba House, Riverside Office Park 1303 Heuwel Avenue, Centurion, Pretoria 0046
	Postal Address:	Private Bag X105, Centurion 0046
	Telephone:	012 848 5300
Working in Conjunction with Preshaan Premlal		
1.1.1.28	The Scope is as given in section C3: Scope of works of tender documents and as described in the clause	
1.1.1.25	The Pricing Data is in the document called part 2: Pricing Data	

1.1.1.20	The offered total of the Prices is in the document called Part 1: Form of Offer and Acceptance
1.1.1.33	The works are the construction of a water reticulation system (Borehole) for Tekwini Community in the Port St Johns Local municipality in Eastern Cape province
1.1.1.30	The site information is in the document called Part 4: Site Information
1.1.1.29	Tekwini Community in the Port St Johns Local Municipality at approximately 31°51'10,5"S; 29°01'38,7"E.
1.1.1.28	The Works Information is in the document called Part 3: Scope of Work
1.3.2	The Governing law is the law of the Republic of South Africa
1.3.3	The <i>language of this contract</i> is English

2 The Parties' main responsibility

4.4.1 & 2	If the <i>Contractor</i> subcontracts work, it should not be more than 30% of the total value of the contract. All relevant clauses under these.
-----------	--

3 Time

5.3.1	The <i>Commencement of the works</i> is 14 days after receipt of award letter unless otherwise agreed by the Parties
5.14.1	The <i>completion date</i> for the whole of the services is 06 months after start of construction.
5.6.1	The <i>Contractor</i> submits programme with the tender according to the <i>Scope</i> , considering the <i>starting date</i> and <i>completion date</i> , which will be adjusted, if need be, based on proposed duration in the programme through consultation.

4 Testing and Defects

7.4.1 ,2 & 3	Samples and testing
7.8.1	The defect correction period is four weeks after completion. The whole clause applies

5 Payment and related matters

6.1.1	The <i>assessment interval</i> is monthly on or before the 20 th day of each successive month.
5.13.1	The <i>Penalty for delay -damages</i> are R1,000.00 per day
5.10.3	The retention is 5 % of the value for work or 10% of each certificate until the 5% value of works has been reached
	The <i>currency of this contract</i> is the South African Rand. The <i>interest rate</i> is the Prime lending rate of the <i>Employer's Bank</i> .

6 Compensation events

	No data required for this section of the <i>conditions of contract</i> .
	The percentage for overheads and profit are as stated in the Contract Data provided by the Contractor

7 Title

	No data required for this section of the <i>conditions of contract</i> .
--	--

8 Risks and Related Matters

8.1, 8.2, 8.3, 8.4, The amounts of insurance and the periods for which the *Employers Agent*
8.5 and 8.6 maintains insurance are as stipulated in the clause

The *Employer* provides no insurance cover.

9 Termination and dispute resolution

10.5.1 & 2 The *Adjudicator* is the person selected by the Parties in terms of the relevant Clause, of the GCC 2015 Third Edition of the Institution of Civil Engineers and the South African Institution of Civil Engineering

10.7.1 The *Reference to arbitration*

10.7.2 The *arbitration procedure* is as set out in the latest edition of Rules for the Conduct of Arbitrations published by the Association of Arbitrators (Southern Africa) or its successor body

The place where arbitration is to be held is To be Advised

The person or organisation who will choose an arbitrator

- if the Parties cannot agree a choice or
- if the *arbitration procedure* does not state who selects an arbitrator, is the Chairman of the Association of Arbitrators (Southern Africa) or its successor body

Transfer of rights

The *Employer* owns the *Contractor*'s rights over material prepared for this contract by the *Contractor* except as stated otherwise in the Works Information. The *Contractor* obtains other rights for the *Employer* as stated in the Works Information and obtains from a subcontractor equivalent rights for the *Employer* over the material prepared by the subcontractor. The *Contractor* provides to the *Employer* the documents which transfer these rights to the *Employer*

Part C1.2 Contract Data

The Contractor is advised to read the GCC for Construction Works 2015 (Third edition) and the relevant Guidance Notes and Flow Charts, published by the Institution of Civil Engineers, in order to understand the implications of this Data, which is required. Copies of these documents may be obtained from Engineering Contract Strategies (telephone (27) 011 803 3008).

Part two - Data provided by the Contractor

4.1 The Contractor is

Name: _____

Physical Address: _____

Post Code: _____

Postal Address: _____ Post Code: _____

Telephone: _____ Fax: _____

Mobile: _____ Email: _____

4.1 The Contractor's key persons are:

1 Name: _____

Position in the Project Team: _____

Responsibilities:

Qualifications:

Physical Address: _____

Post Code: _____

Postal Address: _____ Post Code: _____

Telephone: _____ Fax: _____

Mobile: _____ Email: _____

(Please use separate pages referring to this clause for detailing these information for all key *Consultant's* key persons)

1.1.1.20 The tendered total of the Prices is in the document C.1: Form of Offer and Acceptance

The percentage for overheads and profit added to the Defined Cost for people is %

The percentage for overheads and profit added to other Defined Cost is %



cooperative
governance

Department:
Cooperative Governance
REPUBLIC OF SOUTH AFRICA



Reference no.: RFQ/MISA/599

**APPOINTMENT OF A SERVICE PROVIDER FOR SITING, DRILLING, YIELD TESTING,
WATER QUALITY TESTING, EQUIPPING AND COMMISSIONING OF A BOREHOLE
WATER INFRASTRUCTURE WITHIN THE PORT ST JOHNS LOCAL MUNICIPALITY
WITHIN OR TAMBO DISTRICT MUNICIPALITY IN THE EASTERN CAPE PROVINCE –
TEKWINI BOREHOLE**

C1.3 Securities: Performance bond

(to be reproduced exactly as shown below on the letterhead of the Surety)

{Insert name and registered address of the Contractor}

Date:

Dear Sirs,

Performance Bond for Contract No.

With reference to the above numbered contract made or to be made between

(the Employer) ar

{Insert registered name and address of the Contractor}

(the Contractor), for

{Insert details of the works from the Contract Data}

(the works).

I/We the undersigned

on behalf of the Surety

of physical address

and duly authorised thereto do hereby bind ourselves as Surety and co-principal debtors in solidum for the due and faithful performance of all the terms and conditions of the Contract by the *Contractor* and for all losses, damages and expenses that may be suffered or incurred by the *Employer* as a result of non-performance of the Contract by the *Contractor*, subject to the following conditions:

1. The terms *Employer*, *Contractor*, *works* and *Defects Certificate* have the meaning as assigned to them by the *conditions of contract* stated in the Contract Data for the aforesaid Contract.
2. We renounce all benefits from the legal exceptions "Benefit of Exclusion and Division", "No value received" and all other exceptions which might or could be pleaded against the validity of this bond, with the meaning and effect of which exceptions we declare ourselves to be fully acquainted.
3. The *Employer* has the absolute right to arrange his affairs with the *Contractor* in any manner which the *Employer* deems fit and without being advised thereof the Surety shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the Surety. Without derogating from the foregoing compromise, extension of the construction period, indulgence, release or variation of the *Contractor*'s obligation shall not affect the validity of this performance bond.
4. This bond will lapse on the earlier of
 - the date that the Surety receives a notice from the *Employer* stating that the last *Defects Certificate* has been issued, that all amounts due from the *Contractor* as certified in terms of the contract have been received by the *Employer* and that the *Contractor* has fulfilled all his obligations under the Contract, or
 - the date that the Surety issues a replacement Performance Bond for such lesser or higher amount as may be required by the *Employer*.
5. Always provided that this bond will not lapse in the event the Surety is notified by the *Employer*, (before the dates above), of the *Employer*'s intention to institute claims and the particulars thereof, in which event this bond shall remain in force until all such claims are paid and settled.
6. The amount of the bond shall be payable to the *Employer* upon the *Employer*'s demand and no later than 7 days following the submission to the Surety of a certificate signed by the *Employer* stating the amount of the *Employer*'s losses, damages and expenses incurred as a result of the non-performance aforesaid. The signed certificate shall be deemed to be conclusive proof of the extent of the *Employer*'s loss, damage and expense.
7. Our total liability hereunder shall not exceed the sum of:

R _____

8. This Performance Bond is neither negotiable nor transferable and is governed by the laws of the Republic of South Africa, subject to the jurisdiction of the courts of the Republic of South Africa.

Signed at _____ on this _____ day of _____

Signature(s)	
Name(s) (printed)	
Position in Surety company	
Signature of Witness(s)	
Name(s) (printed)	

C1.3 Securities: Reducing Value Guarantee

(to be reproduced exactly as shown below on the letterhead of the Surety)

{Insert name and registered address of the Employer}

Date:

Dear Sirs,

Reducing Value Guarantee for Contract No.

With reference to the above numbered contract made or to be made between

{Insert registered name of the *Employer*}

(the *Employer*) and

{Insert registered name and address of the *Contractor*}

(the *Contractor*), for

{Insert details of the works from the Contract Data}

(the *works*).

I/We the undersigned

on behalf of the
Guarantor

of physical address

and duly authorised thereto, do hereby undertake to pay the *Employer* forthwith on receipt of written demand from the *Employer* up to the maximum guaranteed sum of

(say)

R

in respect of amounts due by the *Contractor* to the *Employer* for whatever reason in terms of the contract between the *Employer* and the *Contractor* in respect of the *works*. The following further terms shall apply:

- 1 The Guarantor's liability shall be limited to the diminishing amounts of the guaranteed sum as set out below:

Guarantor's Liability	Period of Liability
-----------------------	---------------------

1.1	Maximum guaranteed sum: R _____	From the date this demand bond comes into effect and until the date by when the Price for Work Done to Date has reached or exceeds R
1.2	Reducing to the guaranteed sum of: R _____	From the date by when the Price for Work Done to Date has reached or exceeds the amount stated in 1.1 above and until the date of Completion of the whole of the works
1.3	Reducing to the guaranteed sum of R _____	From the day after the date of Completion of the whole of the works and until the date of issue of the last Defects Certificate.
1.4	Reducing to the guaranteed sum of: R _____	From the day after the date of issue of the last Defects Certificate and up to and including the day on which there are no amounts due by either Party to the other.
1.5	Thereafter this demand guarantee shall lapse.	
2	The terms <i>Employer</i> , <i>Contractor</i> , <i>works</i> , <i>Price for Work Done to Date</i> , <i>Completion</i> , <i>Defects Certificate</i> and <i>Party</i> have the meaning given to them by the <i>conditions of contract</i> stated in the Contract Data for the aforesaid Contract.	
3	The <i>Employer</i> shall have the absolute right to arrange his affairs with the <i>Contractor</i> in any manner which the <i>Employer</i> deems fit and the <i>Guarantor</i> shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the <i>Guarantor</i> . Without derogating from the foregoing, any compromise, extension of the Completion Date, indulgence, release or variation of the <i>Contractor's</i> obligation shall not affect the validity of this demand guarantee.	
4	The <i>Guarantor</i> chooses <i>domicilium citandi et executandi</i> for all purposes in connection herewith at the address appearing above.	
5	This Reducing Value Guarantee is neither negotiable nor transferable and is governed by the laws of the Republic of South Africa, subject to the jurisdiction of the courts of the Republic of South Africa.	
6	The <i>Employer</i> returns this Guarantee to the <i>Guarantor</i> when it has lapsed in terms of clause 1 above or on payment in full thereof whichever is the earlier.	

Signed
at _____ on this _____ Day of _____ 20____

Guarantor: _____

Representative

Representative

Name (printed)

Name (printed)

Capacity

Capacity

As Witness

As Witness

Guarantor's
stamp or seal



cooperative
governance

Department:
Cooperative Governance
REPUBLIC OF SOUTH AFRICA



Reference no:RFQ/MISA/599

**APPOINTMENT OF A SERVICE PROVIDER FOR SITING, DRILLING, YIELD TESTING,
WATER QUALITY TESTING, EQUIPPING AND COMMISSIONING OF A BOREHOLE
WATER INFRASTRUCTURE WITHIN THE PORT ST JOHNS LOCAL MUNICIPALITY
WITHIN OR TAMBO DISTRICT MUNICIPALITY IN THE EASTERN CAPE PROVINCE –
TEKWINI BOREHOLE**

**PART C2: PRICING DATA
INDEX**

PART C2: PRICING DATA

C2.1 Pricing Instructions

1. The General Conditions of Contract, the Special Conditions of Contract, the Specifications (including the Project Specifications) and the drawings shall be read in conjunction with the Schedule of Quantities.
2. The Schedule comprises items covering the Contractor's profit and costs of general liabilities and of the construction of temporary and permanent works. Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Schedule, he should note the fact that the Contractor is entitled, under various circumstances, to payment for additional work carried out and that the Engineer is obliged to base his assessment of the rates to be paid for such additional work on the rates inserted in the Schedule by the Contractor.

Clause 8 of each Standardized Specification and the measurement and payment clause of each Particular Specification, read together with the relevant clauses of the Project Specification, all set out of which ancillary or associated activities are included in the rates for the specific operations.

3. Descriptions in the Schedule of Quantities are abbreviated and may differ from those in the Specifications. No considerations will be given to any claim submitted on these bases. The Schedule has been drawn up generally in accordance with the latest issue of the Standardized Specifications (SANS 1200) as amended in the Project Specifications. Should any requirement of the measurement and payment clause of the appropriate Standardized Specification(s) be contrary to the terms of the schedule or, when relevant, to the Civil Engineering Quantities (the standard system of measurement of Civil Engineering Quantities for South Africa and South West Africa, published by the South African Institution of Civil Engineers), the requirement of the appropriate Standardized, Project, or Particular Specification as the case may be, shall prevail.
4. Unless stated to the contrary, items are measured nett in accordance with the Drawings without any allowance having been made for waste.
5. The amounts and rates to be inserted in the Schedule of Quantities shall be the full inclusive amounts to the Employer for the work described under the several items. Such amounts shall cover all the costs and expenses that may be required in and for the construction of the work described and shall cover the costs of all general risks, profits, taxes (excluding Value Added Tax), liabilities and obligations, including defects as set out in the General Conditions of Contract, set forth or implied in the documents on which the Tender is based.
6. An amount or rate shall be entered against each item in the Schedule of Quantities, whether or not quantities are stated. An item against which no amount or rate is entered will be considered to be covered by the other amounts or rates in the Schedule.

Should the Tenderer group a number of items together and Tender one lump sum for such group of items, the single tendered lump sum shall apply to that group of items and not to each individual item, or should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed to be nil.

The tendered lump sums and rates shall, save as subject to Tender Condition, be valid irrespective of any change in the quantities during the execution of the Contract.

7. The Tenderer shall enter a rate or lump sum for each item in the Schedule of Quantities in **BLACK INK**.
8. The units of measurement described in the Schedule of Quantities are metric units. Abbreviations used in the Schedule of Quantities are as follows:

mm	= millimeter
m	= meter
m^2 or Sq m	= square meter
m^3 or Cu m	= cubic meter

$m^3 \cdot km$	= cubic meter-kilometer
l	= litre
ha	= hectare
t.km	= ton (1000kg)
kg	= kilogram
hr or h	= hour
Prov. Sum	= provisional sum
PC Sum	= prime cost sum
%	= percent
No	= number
C.I.	= cast iron
HDG	= Hot dip galvanized steel to SANS121 / ISO 1461
PVC-U	= unplasticised polyvinyl chloride
PVC-M	= modified polyvinyl chloride
COD	= constant outside diameter
CID	= constant inside diameter
RSV	= resilient seal valve
WGV	= wedge gate valve
HDPE	= high density polyethylene
FC	= fibre cement
HDS	= high design stress

C2.2 Bill of Quantities

Municipal Infrastructure Support Agent (MISA)

APPOINTMENT OF A SERVICE PROVIDER FOR SITING, DRILLING, YIELD TESTING, WATER QUALITY TESTING, EQUIPPING AND COMMISSIONING OF A BOREHOLE WATER INFRASTRUCTURE WITHIN THE PORT ST JOHNS LOCAL MUNICIPALITY WITHIN OR TAMBO DISTRICT MUNICIPALITY IN THE EASTERN CAPE PROVINCE – TEKWINI BOREHOLE

Bill of Quantity (BoQ) for village: TEKWINI

Local Municipality: Port St Johns Local Municipality

District Municipality: OR Tambo District Municipality

BILL OF QUANTITIES DOCUMENT

PROJECT : ALL ITEMS MUST BE PRICED AS PER THE ToR IN THE DOCUMENT

Item No.	Item Description	Unit	Quant.	Rate	Total Amount Rands/cents
1	Preliminary and General	Sum per Borehole	1		
2	Hydrogeological Services	Sum per Borehole	1		
3	Compliance with OHS Act, Construction Regulations & Occupational Health & Safety Particular Specification	Sum per Borehole	1		
4	Compliance with all the parts of the Environmental Management	Sum per Borehole	1		
5	Drilling of Production Borehole per meter to Maximum of 350 meters	Per m Drilled	350		
6	Pump test of production Borehole	Sum per Borehole	3		
7	Water quality analysis (chemical and biological)	Sum per Borehole	3		
8	Protection of Borehole, Tank stand and SOLAR Panels	Sum per Borehole	1		
9	Equipping (Borehole, Submersible Pumps, Water pipework and standpipes and electrical Power Supply) including fencing and t	Sum per Borehole	1		

10	Establishment of a Water Treatment Unit	Prov Sum	1	R 150 000.00	R 150 000.00
11	Handling cost in respect of Item 10	%	R 150 000.00		
12	Commissioning	Sum per Borehole	1		
	Sub-Total				
	15 % Vat				
	Total Cost to Provide one Sustainable Borehole				

PART C3: SCOPE OF WORK

DRILLING AND EQUIPPING OF BOREHOLE:

METHODOLOGY AND SPECIFICATIONS

Based on the proposed groundwater Programme the following methodologies will be employed.

a) Preliminary and General

For work to be executed by the Contractor and Quality control test, Establishment of facilities on site and the De-establishment of facilities on site. Leaving the site with only the Infrastructure and no debris. This shall include traveling to the borehole point during construction.

b) Hydrogeological Survey

➤ Site Assessment and Desk Study

Existing borehole information from in-house database and previous studies conducted by the municipality within the defined project area will be assessed to compare yields, water levels and water quality in order to determine whether the aquifers are stable or deteriorating. Aerial photos and other data obtained from previous groundwater investigations will be studied and extrapolated to identify geological structures such as dykes, faults and lineaments that can be used for water balances sheet.

➤ Siting

The borehole will be installed within the Towns/Villages of Tekwini in Port St Johns LM. The appointed Service Provider will be required to use available and appropriate methods to site a borehole to ensure that it produces adequate yield. The decision to drill more than one borehole will depend on the yield of the first borehole. The location of boreholes, should more than one be required, must be at least 30-50 m away from a potential pollution source such as on-site toilets, cattle kraals or cemeteries, but as close to the village as possible.

➤ Hydro-census

Borehole verification within a 1 km radius of the identified location will be conducted to verify the use of groundwater in the area. Existing boreholes and springs in the defined areas will be the direction of groundwater in the area.

• Geophysical Investigation

A geophysical survey must be conducted to identify and accurately position any structural features and lithology changes which could influence groundwater movement. The geophysical survey to accurately define the positions of structural features, weathering zones and other features of significance to groundwater occurrence will comprise Electro Magnetic 34(EM-34) and magnetic profiling supported by Vertical Electrical Resistivity Soundings (VES) if required. The survey will assist in selecting sites for the drilling of groundwater boreholes.

A proton precision magnetometer (G-856 Memory-Mag.) manufactured by Geometrics will be used for the magnetic surveys as well as EM 34 manufactured by Geonic. The Magnetic and EM survey method are useful in identifying intrusive dykes and geological contact zones. A station spacing of 10 m will be used during the survey. Data from the magnetic survey will be processed and presented as profiles using spread sheets (MS Office Excel).

The magnetic traversing will be done using a proton fluid magnetometer, the magnetic survey will be run in conjunction with the EM-34 survey.

• Drilling Supervision/ Testing Supervision

The Hydrogeological service will include the supervision of the drilling and advise the municipality and MISA on the possibility of striking water of an expectable yield. Also included will be the supervision of the yield test to confirm the sustainable yield of the borehole.

• Drilling of Production Borehole

- Only one borehole will be equipped and be at least 165 mm in diameter. The municipality and MISA together with the Service Provider, to ensure and secure a sustainable yield borehole.
- A total of 350 m of drilling will be accepted in order to strike water. This can potentially be spread over three boreholes, depending on whether water has been obtained or not. MISA together with the driller, will decide to stop drilling, and equip or move to the next site. No borehole should be deeper than 150 m.

- The Drilling Contractor will only be paid for meters drilled and meters of casing installed in the borehole.
- All groundwater boreholes will be drilled in order to facilitate aquifer parameter testing and groundwater sampling. The borehole will be drilled using down the hole air percussion equipment.
- The drilling will be drilled according but not limited to the DWS minimum standards and guidelines:
 - a) The development of a production boreholes shall entail hydrogeological investigations, siting, drilling of new boreholes, and test pumping.
 - b) The Municipality and MISA will inform the service provider based on the yield test and water quality which borehole to equip.
 - c) The Borehole development shall further entail the removal of drilling fines from aquifer pores, removal of drilling foam/mud, and establishing a gravel pack filter around the borehole-aquifer interface.
 - d) Borehole development method for use shall be determined by the hydrogeological investigation's recommendations.
 - e) The Borehole diameter shall be determined by the findings of the hydrogeological investigations and site conditions, but not smaller than 165 mm.
- All installations shall make use of a SOLAR electricity supply system and any alternate method of energy supply must be approved by the municipality and MISA. The selection of the SOLAR pump type and capacity shall be based on:
 - a. Maximum required/available capacity and safe yield
 - b. Total pumping head
 - c. Maximum pumping rate feasible
- The borehole is to be fully screened (from the water table to bedrock) with a 0.5 m sump. A fine screen (5 mm long and 0.6 mm wide) is to be used to prevent sediment entry into the borehole and fine gravel pack is to be installed in the borehole annulus around the screen. The size of the gravel pack particles should be larger than slot/screen sizes. A bentonite pellet seal is to be installed above the depth at which the water table occurs. The borehole should be sleeved all the way.

Pump Test of the Production Borehole

Only the borehole agreed between the Municipality and MISA and the Driller, will be subjected to aquifer testing. This will be done with the aid of positive displacement pumps, and it will entail step drawdown test to determine borehole efficiencies and constant rate test to determine the aquifer parameters and yield estimates. It is anticipated that a 24 to 48-hour constant discharge tests will be done in the respective boreholes.

- **Step Tests**

Step drawdown tests will be performed to more clearly define the optimum yield at which the constant discharge test can be run. The tests will involve pumping the agreed boreholes at four sequentially higher pumping rates each maintained for an equal length of time, generally not less than 60 minutes. The magnitude of drawdown of the water level in the borehole in response to each of these pumping rates will be measured and recorded on a time schedule as well as the actual pumping rate maintained during each step.

- **Constant Discharge Tests**

Once the step drawdown tests have been completed the agreed borehole will be subjected to a constant discharge test over 24 to 48 hours in order to obtain aquifer parameters such as transmissivity and Distribution.

The constant discharge tests will be performed to assess the productivity of the aquifer according to its response to the abstraction of water. This response can be analyzed to provide information in regard to the hydraulic properties of the aquifer. These tests will require the boreholes to be pumped at a single pumping rate which is kept constant for the duration of the test. The pumping rates will be set at yields which will be considered to be sustainable for the duration of the tests. The drawdown in water level in the boreholes will be measured during the course of the tests and recorded against a time schedule. Should there be any boreholes within close proximity to pumped borehole, the drawdown in water level will be measured and recorded on the same time schedule as the pumped borehole. Water level measurements will be recorded during the recovery period following the end of pumping of the agreed borehole.

Borehole water Sampling

A borehole water sample must be collected from the tested borehole at the end of pumping test exercise in order to obtain a representative elementary volume of the aquifer.

These samples must be submitted to an accredited analytical laboratory for the analyses of major cation and anion distribution, pH, electrical conductivity, total alkalinity and the water quality be classified according DWA Drinking Standards as well as SANS 241-1:2015.

If treatment is required, see "Water Purification Systems 11 April 2020" document.

□ Protecting Ground Water

The site conditions and layout shall determine the feasible measures to be put in place to protect the groundwater from contamination and equipment from theft and damage.

The following guidelines shall be followed when determining the feasibility of protecting the borehole:

- The borehole and pump must be protected in a concrete rings and with a lockable manhole for inspections and to do Maintenance to the pump installation.
- The SOLAR installation should be protected with razor wire to prevent theft.
- The Galvanised Tank stand with 1 X 10000 l tanks should be protected with razor wire to prevent theft.
- SOLAR electrical equipment must be in a steel lockable box, secured to the ground and should be protected with razor wire to prevent theft.

□ Equipping

✓ Borehole

- The borehole collar is to be below ground surface.
- A section of steel casing with a lockable cap should be installed around the borehole collar
- The Borehole shall be fitted with a Flow meter
- All Boreholes shall be fitted with a conduit pipe to facilitate monitoring of groundwater test levels.
- Borehole shall be disinfected where the water chemical analysis recommends action.
- A Borehole cap shall be used to seal the borehole.
- The site at each borehole is to be cleaned after completion of the borehole.

✓ Submersible pump

Submersible borehole pump complete with steel manhole cover.

✓ Pump Size

The pump will be determined as per 4 above

✓ Storage

- 1 x 10 000 litres Water tank
- 1 x 4.5 m high steel stand. All steel members to be hot dipped galvanised and oil paint application for water structures.

✓ Water pipework and standpipes

The water stand with the 1X 10000 l tanks will not be more than 50 m from the borehole. The outlet of the tanks will be connected. Excavation in all materials for trenches for up to including 75 mm nominal diameter pipes and smaller, up to 1 m deep. Pipes and cables to have a minimum cover of 800 mm. Relevant pipes should be DN Class 9 and 25 DN Class 9. For the two Standpipes, the two-standpipe installation, complete with in-situ constructed concrete trough. Rates include backfill, compact and disposal of surplus and unsuitable material. All the necessary pipework, connections, standpipes and ancillary works shall be implemented by the contractor even when they are not expressly mentioned in the BOQ.

✓ Electrical Power Supply

It is expected that the current electricity supply will be from solar panels. The sizing of the solar panel installation will also be dependent on the borehole pump size and related electrical system needs. The SOLAR panels must be installed on a stand and secured against theft.

□ Commissioning

- Once the borehole is completed and functional, commissioning must be done on site with representatives of the respective **Local Municipality** and MISA.
- If the MISA and the Local Municipality is satisfied with the operations of the installed borehole, the final payment will be authorized.

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this Invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

21

Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? YES/NO

YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

2.2 Do you, or any person connected with the bidder, have a relationship

1 the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding votes or power to influence or to direct the course and decisions of the enterprise.

with any person who is employed by the procuring institution? YES/NO

2.2.1 If so, furnish particulars:

.....
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? YES/NO

2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, the undersigned,
(name)..... in
submitting the accompanying bid, do hereby make the following
statements that I certify to be true and complete in every respect:

3.1 I have read and I understand the contents of this disclosure;
3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
3.3 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 consortium² will not be construed as collusive bidding.
3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
3.4 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.
3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring

² 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.

institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

3.8 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.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

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

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

NB: BEFORE COMPLETING THIS FORM, BIDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE BID AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to bid:

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

1.2 **To be completed by the organ of state**

a) The applicable preference point system for this bid is the 80/20 preference point system.

b) Either the 80/20 preference point system will be applicable in this bid. The lowest/highest acceptable bid will be used to determine the accurate system once bids are received.

1.3 Points for this bid (even in the case of a bid for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this bid are allocated as follows:

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

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

1.6 The organ of state 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 organ of state.

2. DEFINITIONS

- (a) "bid" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive bidding process or any other method envisaged in legislation;
- (b) "price" means an amount of money bided for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) "bid for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

80/20

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

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

Pmin = Price of lowest acceptable bid

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

3.2.1. POINTS AWARDED FOR PRICE

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

80/20

$$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

Ps = Points scored for price of bid under consideration
Pt = Price of bid under consideration
Pmax = Price of highest acceptable bid

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the bid. For the purposes of this bid the bidder will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this bid:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the bid documents, stipulate in the case of—
 - (a) an invitation for bid for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable bid will be used to determine the applicable preference point system; or
 - (b) any other invitation for bid, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable bid will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the bid and points claimed are indicated per the table below.

Note to bidders: The bidder must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this bid	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the bidder)
B-BBEE STATUS LEVEL	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

- 4.3. Name of company/firm.....
- 4.4. Company registration number:
- 4.5. TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium
One-person business/sole property
Close corporation

Public Company
Personal Liability Company
(Pty) Limited
Non-Profit Company
State Owned Company
[TICK APPLICABLE BOX]

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

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the 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) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF BIDER(S)

SURNAME AND NAME:

DATE:

ADDRESS: