



KWAZULU-NATAL PROVINCE
AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

KWAZULU-NATAL DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

QUOTATION No: R/S/2324/1721

DESCRIPTION OF SERVICE:

**APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY, DELIVER AND INSTALL
THE IRRIGATION SYSTEM AT KWAMNGANI FARM**

NAME OF BIDDER:

Mandatory Requirements

1. Minimum of **CIDB Grading 2SH/2CE**
2. Certified Copy of Identity Document (for the purposes of claiming specific goals)

COMPULSORY BRIEFING SESSION

Meeting Point	Shell vans Garage, R603 Mbumbulu road (uMllass road)
Meeting Time	10:00 for 10:30
Briefing Venue	KWAMNGANI FARM 3KM SOUTH OF CAMPERDOWN
Date	27 September 2023
Briefing Time	11:30AM

Return of Bid:

Bids must be deposited in the bid box situated at Department of Agriculture and Rural Development, Supply Chain Management, 01 Cedara Road, Cedara, 3200 or send by post to :

The Director: Supply Chain Management, Private Bag X9059, Pietermaritzburg, 3200.

Tel: (033) 355 9359 before 11:00 am on the closing date: **29 September 2023**

Issued by:

The Department of Agriculture and Rural Development

1 Cedara Road

Cedara

3200



KWAZULU-NATAL PROVINCE

AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

INVITATION OF QUOTATION FROM R1 - R1 MILLION

THIS FORM SHOULD BE COMPLETED IN DETAIL AND SHOULD BE ACCOMPANY A VALID BBBEE CERTIFICATE/SWORN AFFIDAVIT /CSD REPORT/PROOF OF RESIDENCE

QUOTATION NUMBER: R/S/2324/1721	VALIDITY PERIOD OF QUOTATION..... Days (To be completed by the Supplier)
CLOSING DATE: 29 September 2023	CLOSING TIME:11H00
DESCRIPTION(SPECIFICATION/S) OF ITEMS/ SERVICE REQUIRED: APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY,DELIVER AND INSTALL THE IRRIGATION SYSTEM AT KWAMNGANI FARM	COMPANY NAME: TEL NO: FAX NO: CONTACT PERSON: CSD REG NUMBER MAAA.....
DOES OFFER COMPLY WITH SPECIFICATION?	YES/NO (DELETE WHICH EVER IS NOT APPLICABLE)
DOES ARTICLE COMPLY WITH SABS SPECIFICATION? HAS IT BEEN INSPECTED BY SABS?	YES/NO YES/NO (DELETE WHICH EVER IS NOT APPLICABLE)
DELIVERY PERIOD AFTER INITIAL ORDER?	
IS THE PRICE FIRM	
WHERE ARE THE STOCK HELD? (PHYSICAL ADDRESS , PLEASE)	
QUOTATION PRICE INCLUDING VAT (VAT TO BE ADDED BY REGISTERED VAT VENDORS ONLY)	TOTAL: R
COMPANY OFFICIAL STAMP (COMPULSORY) SIGNATURE OF BIDDER DATE
QUOTATION TO BE RETURNED TO: Tender box at SCM Cedara Head office 1 Cedara road Pietermaritzburg Department of Agriculture and rural development FOR ATTENTION TO : Nomthandazo Zulu TEL NUMBER : 033 355 9359	
NB: DOCUMENT MUST BE COMPLETED IN FULL, THIS QUOTATION COVER PAGE MUST BE COMPLETED AND RETURNED WITH ALL YOUR SUPPORTING DOCUMENTS.	

FOR ENQUIRY ONLY

END-USER NAME : Nhlanhla Ngcamu
TELEPHONE NUMBER : 033 343 8068
E-MAIL ADDRESS : nhlanhla.ngcamu@kzndard.gov.za
PROPOSED DELIVERY DATE : 31 October 2023
DELIVERY ADDRESS : KwaMngani Irrigation Scheme Project
LOCAL MUNICIPALITY : Camperdown Local Municipality
DISTRICT : Umgungundlovu District

LINE NO.	DESCRIPTION OR SPECIFICATION OF ITEM (Please be very specific and clear)	REQUIRED QUANTITY	UNIT PRICE EXCL. VAT		TOTAL PRICE	
			R	C	R	C
1.	New Irrigation Scheme at KwaMngani Irrigation Scheme					
* LABOUR (IF APPLICABLE)						
*DELIVERY (IF APPLICABLE)						
TOTAL						
*ONLY APPLICABLE TO VAT REGISTERED SUPPLIERS 15% VAT						
TOTAL PRICE						
CIDB Grading (IF APPLICABLE)						

COMPANY NAME : _____

CSD NUMBER : _____

ADDRESS : _____

CONTACT PERSON : _____

CONTACT NUMBER : _____

*VAT Registration No. (Supplier) -----

PRICES ARE VALID FOR DAYS **Mark one Box (X)**
 30 60 90 120

SIGNATURE.....

DATE.....

**PART A
INVITATION TO BID**

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	R/S/2324/1721	CLOSING DATE:	29 September 2023	CLOSING TIME:	11:00
DESCRIPTION	APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY, DELIVER AND INSTALL THE IRRIGATION SYSTEM AT KWAMNGANI FARM				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
THE DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT ,01 CEDARA ROAD, SCM BID BOX					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Nomthandazo Zulu		CONTACT PERSON	Thembeke Ngcobo	
TELEPHONE NUMBER	033 355 9359		TELEPHONE NUMBER	083 884 2762	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER		
E-MAIL ADDRESS	Nomthandazo.zulu@kzndard.gov.za		E-MAIL ADDRESS	Thembeke.ngcobo@kzndard.gov.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]	
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

**PART B
TERMS AND CONDITIONS FOR BIDDING**

1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022 , THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE.

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

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

.....

(Proof of authority must be submitted e.g. company resolution)

DATE:

.....

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

2.1 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**

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.

Full Name	Identity Number	Name of State institution

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

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 vote or power to influence or to direct the course and decisions of the enterprise.

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 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.
- 3.6 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 bid

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.

SBD 6.1

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

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

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

1. GENERAL CONDITIONS

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

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

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

(delete whichever is not applicable for this tender).

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

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

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

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

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

The maximum points for this tender 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 tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

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

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:

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

Where

- P_s = Points scored for price of tender under consideration
 P_t = Price of tender under consideration
 P_{max} = Price of highest acceptable tender

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 tender. For the purposes of this tender the tenderer 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 tender:

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 tender documents, stipulate in the case of—

- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender 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 tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

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

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
100% black ownership	10	
black people who are Youth	10	
black people who are Locality	10	
black people who are women	8	
black people with disabilities (Proof to be attached)	7	
black people living in rural or underdeveloped areas or townships	6	
black people who are military veterans (Proof to be attached)	6	
a cooperative owned by black people	5	

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 propriety
- 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 tender, 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 tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

SECTION D

OFFICIAL BRIEFING SESSION/SITE INSPECTION CERTIFICATE

N. B.: THIS FORM IS ONLY TO BE COMPLETED WHEN APPLICABLE TO THE BID.

Site/Building/Institution Involved:

Quotation Reference No: **R/S/2324/1721**

Goods/Service/Work: **APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY, DELIVER AND INSTALL THE IRRIGATION SYSTEM AT KWAMNGANI FARM**

This is to certify that (bidder's representative name)

On behalf of (company name) _____

Visited and inspected the site on ___/___/_____ (date) and is therefore familiar with the circumstances and the scope of the service to be rendered.

Signature of Bidder or Authorized Representative
(PRINT NAME)

DATE: ___/___/_____

Name of Departmental or Public Entity Representative
(PRINT NAME)

Departmental Stamp With Signature

SECTION G

SBD 7.2

CONTRACT FORM - RENDERING OF SERVICES

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

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

1. I hereby undertake to render services described in the attached bidding documents to (name of the institution)..... in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid .
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Bidding documents, viz
 - Invitation to bid;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Filled in task directive/proposal;
 - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
 - Declaration of interest;
 - Declaration of bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES	
1
2
DATE:

CONTRACT FORM - RENDERING OF SERVICES

PART 2 (TO BE FILLED IN BY THE PURCHASER)

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

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)
APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY, DELIVER AND INSTALL THE IRRIGATION SYSTEM AT KWAMNGANI FARM				

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

SIGNED ATON.....

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

WITNESSES

1

2

DATE:

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Enterprise Physical Address:	
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	
Nature of Business:	
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – (a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization- i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date

Definition of "Black Designated Groups"	"Black Designated Groups means: (a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution; (b) Black people who are youth as defined in the National Youth Commission Act of 1996; (c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act; (d) Black people living in rural and under developed areas; (e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011;"
--	---

3. I hereby declare under Oath that:

- The Enterprise is _____% Black Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise is _____% Black Woman Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise is _____% Black Designated Group Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- Black Designated Group Owned % Breakdown as per the definition stated above:
- Black Youth % = _____%
- Black Disabled % = _____%
- Black Unemployed % = _____%
- Black People living in Rural areas % = _____%
- Black Military Veterans % = _____%
- Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of _____, the annual Total Revenue was between R10,000,000.00 (Ten Million Rands) and R50,000,000.00 (Fifty Million Rands),
- Please Confirm on the below table the B-BBEE Level Contributor, **by ticking the applicable box.**

100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned	Level Two (125% B-BBEE procurement recognition level)	
Less than 51% Black Owned	Level Four (100% B-BBEE procurement recognition level)	

4. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the Owners of the Enterprise which I represent in this matter.

5. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: _____

Date : _____

Commissioner of Oaths Signature & stamp

SWORN AFFIDAVIT – B-BBEE QUALIFYING SMALL ENTERPRISE - GENERAL

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Enterprise Physical Address:	
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	
Nature of Business:	
Definition of “Black People”	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 “Black People” is a generic term which means Africans, Coloureds and Indians – a) Who are citizens of the Republic of South Africa by birth or descent; or b) Who became citizens of the Republic of South Africa by naturalization- I. Before 27 April 1994; or II. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date

Definition of “Black Designated Groups”	“Black Designated Groups means: a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution; b) Black people who are youth as defined in the National Youth Commission Act of 1996; c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act; d) Black people living in rural and under developed areas; e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011;”
--	--

3. I hereby declare under Oath that:

- The Enterprise is _____ % Black Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise is _____ % Black Woman Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise is _____ % Black Designated Group Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- Black Designated Group Owned % Breakdown as per the definition stated above:
 - Black Youth % = _____ %
 - Black Disabled % = _____ %
 - Black Unemployed % = _____ %
 - Black People living in Rural areas % = _____ %
 - Black Military Veterans % = _____ %
- Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of _____, the annual Total Revenue was between R10,000,000.00 (Ten Million Rands) and R50,000,000.00 (Fifty Million Rands),
- Please Confirm on the below table the B-BBEE Level Contributor, **by ticking the applicable box.**

100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned	Level Two (125% B-BBEE procurement recognition level)	
Less than 51% Black Owned	Level Four (100% B-BBEE procurement recognition level)	

- I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the Owners of the Enterprise which I represent in this matter.
- The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: _____

Date : _____

Commissioner of Oaths Signature & stamp



**APPOINTMENT OF A SERVICE PROVIDER TO SUPPLY, DELIVER AND
INSTALL THE IRRIGATION SYSTEM AT KWAMNGANI FARM IN
CAMPERDOWN WITHIN UMGUNGUNDLOVU DISTRICT MUNICIPALITY**



TABLE OF CONTENTS PROJECT TECHNICAL SECTION

No.	Section	Pages	Read/ Complete
1	Table of Contents		Read
2	Terms of Reference		Read
3	Special Terms & Conditions		Read
4	Standard Technical Specifications		Read
5	LIST OF ANNEXURES		Read
6	ANNEXURE A: LOCALITY MAP		Read
7	ANNEXURE B: SUMMARY OF SCHEDULES		RETURNABLE
8	ANNEXURE C: BILL OF QUANTITIES		RETURNABLE
9	ANNEXURE D: CONTRACTOR'S HEALTH & SAFETY DECLARATION		RETURNABLE
10	ANNEXURE E: ADDITIONAL INFORMATION-EXPIRIENCE		RETURNABLE
11	ANNEXURE F: DRAWINGS		RETURNABLE

DISCLAIMER

[1] COMPLETENESS OF THE DOCUMENT

The information regarding project site condition, and site information supplied, is provided in good faith for the contractor's convenience as an indication of conditions likely to be encountered. No responsibility will be accepted for, and there is no guarantee of the information being representative of the whole area of the works or materials. The information provided will not be regarded as in any way limiting the Contractor's responsibilities. He/ She will be held to have satisfied him of all conditions to be encountered on site and to allow accordingly in his/her tendered rates.

[2] APPLICABLE STANDARDS

The South African Bureau of Standards, Standard Specifications for Civil Engineering Construction (SANS 1200) shall apply to this Contract together with additional amendments as set out herein. The Contractor shall have available for reference on site at all times a full set of the above specifications, together with any other to which they refer. These specifications shall remain the property of the Contractor but shall be made available to the Engineer whenever required throughout the duration of the Contract.

[3] CONTRACT DOCUMENTS

3.1 This document must be read in conjunction with the General Conditions for Construction works (GCC, 3rd edition of 2015), which will govern the implementation of the works. The contractor is presumed to possess a copy of this document and/or have a working knowledge of its conditions.

3.2 In addition, the attached drawing (See Annexure F - List of Drawings), as well as the Special Conditions and Project Particular Specifications (PPS) and these Terms of Reference are deemed to be part of the contract documentation.

3.3 If the contractor has the impression that the information provided in the drawings and the technical specifications and/or Bill of Quantities contradict each other or are perceived to be ambiguous, (s)he should point this out to the Engineer and ask for clarification at before the commencement of any construction. The same applies for any other purported differences between these documents.



1 BACKGROUND

KwaMngani Farm approached the Department of Agriculture and Rural Development requesting assistance with the installation of new irrigation system. They are intending to plant vegetables under irrigation.

2 OBJECTIVES

- 2.1.1 The Employer seeks to appoint a suitable and competent Service Provider to supply, deliver and install an irrigation system at KwaMngani Farm.
- 2.1.2 The irrigation system involve the installation of the pipe network, construction of the pump houses, installation of the pumps and motors with all associated materials.
- 2.1.3 The Employer desires that the work required be of a high standard and be completed in the shortest practical time whilst making use of local labour where practical possible.

3 SCOPE OF WORKS

The purpose of the project is to develop an irrigation system for an area of approximately 2ha, to irrigate vegetables. The system will include the supply, delivery, installation and commissioning of the irrigation. Extent and scope of works is as follow

- 3.1.1 Site setting out and establishment.
- 3.1.2 Site clearance where necessary
- 3.1.3 Earthworks: Excavate topsoil from the area, excavation of pipe trenches, including all necessary soil compaction.
- 3.1.4 Supply, delivery, lay and backfill all the pipe works and necessary fittings
- 3.1.5 Construction of new pump houses with all the required works
- 3.1.6 Supply, deliver by road and install pumping units as required with all required fittings,
- 3.1.7 Design, supply and installation of switch gear, cables and all electrical connections suitable to control the pumping unit.
- 3.1.8 Installation of electric works from the ESKOM transformer to the pump station with all required cabling
- 3.1.9 Rehabilitation of the existing borehole, (assessing the existing borehole, installation of the new borehole)
- 3.1.10 Test and commission all the works.

4 PROJECT LOCATION

KwaMngani Farm project is within uMgungundlovu District Municipality in KwaZulu Natal. The project is located approximately 3km South of Camperdown Town. The project is located in the following coordinates 29°45'22.64"S; 30°30'24.85"E.



SPECIAL TERMS & CONDITIONS

1 INTRODUCTION

- 1.1 Bidders must ensure that they are fully aware of all the Terms and Conditions contained in this bid document. Only bidders that fully meet the prequalification shall be considered.
- 1.2 The Bidder is required to check the number of consecutively numbered pages. Should any found to be missing or in duplicate, or the text of figures indistinct, or should there be any doubt or obscurity as to the meaning of any part of these documents, the Bidder must ascertain the true meaning or intent of the same prior to the submission of his/her Bid. No claims arising from any incorrect interpretation will be admitted.

2 ACCEPTANCE OF BID

- 2.1 The Department is under no obligation to accept any bid.

3 AMENDMENT OF CONTRACT

- 3.1 Any amendment to or renunciation of the provisions of the contract shall at all times be done in writing and shall be signed by both parties, subject to the Department approval.

4 AWARD

- 4.1 All bids received shall be evaluated on the following phases of evaluation:
 - (i) Stage one: Administrative Compliance
 - (ii) Stage two: Price and Specific Goals

5 BASIS OF QUANTITIES

- 5.1 Quantities are as reflected on the Bill of Quantities as attached as the annexure.

6 BBBEE CERTIFICATE

- 6.1 A bidder claiming BBBEE points must submit a valid BBBEE certificate or a sworn affidavit together with the bid.

7 CHANGE OF ADDRESS

- 7.1 Bidders must advise the Departmental Supply Chain Management, Contract Administration should their ownership or address (domicilium citandi et executandi) details change from the time of bidding to the expiry of the contract.

8 COMPETENCY OF THE SERVICE PROVIDER

- 8.1 This bid is open for contractors with a Construction Industry Development Board (CIDB) data base grading of a **minimum of 2SH/2CE or higher**. The contractor is to submit evidence of his/her OWN **Active** registration.
- 8.2 It shall be vital for the appointed supplier to have sufficient financial resources and capacity to finance and execute as per terms and conditions of the contract.



9 COMPULSORY SITE BRIEFING

- 9.1 A compulsory site-briefing meeting will be held with prospective Bidders. Attendance at the meeting will be compulsory and non-attendance shall invalidate any bid. The date and time of the meeting will be published in the Bid Advertisement or, in the case of a quote, be communicated when the prospective service provider is invited to quote.

10 COUNTER OFFERS

- 10.1 Counter offers shall not be considered.

11 DELIVERY CONDITIONS

- 11.1 Delivery of services must be made in accordance with the instructions appearing on the official purchase order.
- 11.2 All deliveries or dispatches must be accompanied by a delivery note stating the official purchase order number against the delivery that has been affected.
- 11.3 In respect of items awarded to them, contractors must adhere strictly to the delivery periods stipulated by them in their bid document.
- 11.4 The instructions appearing on the official purchase order form regarding the supply, dispatch and submission of invoices must be strictly adhered to.
- 11.5 All invoices submitted must be original.
- 11.6 Deliveries not complying with the order form shall be returned to the contractor at the contractor's expense.

12 DETAILS OF CONSTRUCTION CONTRACTS AWARDED TO THE BIDDER PAST/CURRENT (ANNEXURE E)

- 12.1 The bidder must furnish the following details of all verifiable past and current irrigation installation contracts.
- 12.1.1 Date of commencement of contract/s;
- 12.1.2 Value per contract; and
- 12.1.3 Contract details, which includes with whom held, phone number and Address/s of the companies.

13 ENTERING OF DEPARTMENTAL OFFICES

- 13.1 No representative from a company shall be permitted to enter Departmental premises, buildings or containers where stores are kept unless the responsible official in charge of stores accompanies him / her.

14 EQUAL BIDS

- 14.1 If two or more bidders score an equal total number of points, the contract must be awarded to the bidder that scored the highest points for BBBEE.



15 INVOICES

- 15.1 All invoices submitted by the Contractor must be Tax Invoices indicating quantity ordered and quantity delivered, the amount of tax charged and the total invoice amount.
- 15.2 A tax invoice shall be in the currency of the Republic of South Africa and shall contain the following particulars:
- 15.2.1 The name, address and registration number of the supplier;
 - 15.2.2 The name and address of the recipient;
 - 15.2.3 An individual serialized number and the date upon which the tax invoice is issued;
 - 15.2.4 A description of the goods or services supplied;
 - 15.2.5 The quantity or volume of the goods or services supplied;
 - 15.2.6 The value of the supply, the amount of tax charged and the consideration for the supply; or
 - 15.2.7 Where the amount of tax charged is calculated by applying the tax fraction to the consideration for the supply and either the amount of the tax charged, or a statement that it includes a charge in respect of the tax and the rate at which the tax was charged.

16 IRREGULARITIES

- 16.1 Companies are encouraged to advise the Department timeously of any possible irregularities which might come to their notice in connection with this or other contracts.

17 JOINT VENTURES

- 17.1 In terms of the Preferential Procurement Regulations, 2017 pertaining to the Preferential Procurement Policy Framework Act 5 of 2000, a trust, consortium or joint venture must submit a consolidated BBBEE Status Level Verification Certificate for every separate bid.
- 17.1.1 Should this bid be submitted by a joint venture, the joint venture agreement must accompany the bid document before the closing date and time of the BID. The joint venture agreement must clearly specify the percentage of the contract to be undertaken by each company participating therein.
 - 17.1.2 The non-submission of a BBBEE Certificate by a trust, consortium or joint venture shall result in zero (0) preference points being allocated for evaluation purposes.
 - 17.1.3 Each party to a Joint Venture/ Consortium must submit an original valid Tax Clearance Certificate together with the bid before the closing date and time of bid.
 - 17.1.4 The joint venture or consortium must submit a formal agreement that outlines the roles and responsibilities of each member of the joint venture or consortium, nomination of an authorised person to represent the joint venture or consortium in all matters relating to this bid and the details of the bank account for payments to be effected.
 - 17.1.5 The joint venture or consortium must comply with Central Suppliers Database (CSD) registration requirements as per National Treasury directive.



18 LATE BIDS

- 18.1 Bids are late if they are received at the address indicated in the bid documents after the closing date and time.
- 18.2 A late bid shall not be considered and, where practical, shall be returned unopened to the Bidder, accompanied by an explanation

19 NOTIFICATION OF AWARD OF BID

- 19.1 The successful bidder shall be notified via an advert in the same media as the invitation to tender.

20 PAYMENT FOR SUPPLIES AND SERVICES

- 20.1 A contractor shall be paid by the Department in accordance with supplies delivered and services rendered.
- 20.2 Should a contractor indicate a special discount on his/her account provided payment is made within a certain time, the Department shall make every effort to take advantage of such discount.
- 20.3 Any query concerning the non-payment of accounts must be directed to the Department. The following protocol shall apply if accounts are queried:
- 20.4 Contact must be made with the officer-in-charge of the District office;
- 20.5 If there is no response from the District office, the Director: Finance must be contacted;
- 20.6 Information as contained on the Central Suppliers Database must be valid/correct. Non-compliance with Tax Requirements shall affect payment.

21 PERIOD OF CONTRACT

- 21.1 The contract to be implemented in **four (4)** calendar months effective from the site hand-over date to the contractor.

22 PRE-QUALIFICATION CRITERIA

- 22.1 Only bidders who meet both of the following prequalification criteria may respond:-
- 22.1.1 BBBEE level 1 (as per the provisions of section 4(1)(a) of the PPPFA Regulations, 2017); and
- 22.1.2 EME (as per the provisions of section 4(1)(b) of the PPPFA Regulations, 2017)
- 22.1.3 CIDB **2SH/2CE** Minimum.
- 22.2 Bidders must submit documentary proof of compliance with the above prequalification criteria.
- 22.3 Bidders who fail to comply with the above-stipulated prequalification criteria or fail to submit documentary proof of the compliance with the prequalification criteria shall not be considered for this bid.

23 QUALITY CONTROL/ TESTING OF PRODUCTS

- 23.1 The Department reserves the right to inspect and verify the quality and specifications of the supplied materials and equipment, as well as other items listed on the Bill of Quantities, **before** construction and/or installation. In case of deviations in terms of dimensions, strength, numbers



or otherwise, the Contractor shall replace these goods for the correct ones at his/her own expense.

- 23.2 The same replacement obligation to the Contractor would apply during the construction phase.
- 23.3 In the case of sustained or repeated non-adherence to the specifications of the materials and/or equipment, as well as in the case of general negligence during the implementation process, the contract may be cancelled. The Department will in such cases seek compensation from the contractor for the estimated costs for completion.
- 23.4 In cases of deliberate negligence or unwillingness to adhere to the Departmental specifications, the Service provider will be reported to the Provincial and/or National Treasury for listing on the restricted section of the Central Suppliers database.

24 ORDER OF PRECEDENCE

- 24.1 This invitation to bid/quote is issued in accordance with the provisions of the Public Finance Management Act (PFMA), Chapter 16 A of the *Treasury Regulations* and shall be subject to the provisions of the *National Treasury Government Procurement General Conditions of Contract* (July 2010).
- 24.2 The Special Terms and Conditions are supplementary to that of the General Conditions of Contract. Where, however, the Special Terms and Conditions are in conflict with the General Conditions of Contract, the Special Terms and Conditions shall prevail.

25 SUPPLIERS DATABASE REGISTRATION

- 25.1 A bidder submitting an offer must be registered on the Central Suppliers Database at National Treasury. A bidder who has submitted an offer and is not registered on the Central Suppliers Database shall not be considered at the time of award. No pending registrations shall be considered.
- 25.2 A Joint Venture/Consortium must be registered on the Central Suppliers Database at the time of submitting the bid.
- 25.3 **NB: If a bidder is found to be employed by the State and is on the Central Suppliers database, the bidder shall be disqualified.**

26 TAX AND DUTIES

- 26.1 During quotation stage, prices offered and paid must include all customs, excise and import duties, and any other tariffs or taxes levied by the government or statutory body having jurisdiction on the goods provided under this contract, including Value Added Tax (applicable at the current rate).

27 TAX COMPLIANCE PIN

- 27.1 The bidder must submit a valid Tax Compliance Pin with the bid. Bidders should note that their tax compliance status shall be verified through the Central Supplier Database and SARS.
- 27.2 Where a Tax Compliance Pin is not submitted with the bid, the Department shall use the Central Supplier Database to verify the tax matters of the bidder.



28 UNSATISFACTORY PERFORMANCE

- 28.1 Unsatisfactory performance occurs when performance is not in accordance with the contract conditions.
- 28.2 The Departmental official shall warn the contractor in writing that action shall be taken in accordance with the contract conditions unless the contractor complies with the contract conditions and delivers satisfactory supplies or services within a specified reasonable time (7 days minimum).
- 28.3 If the Contractor fails to commence the Works or to proceed with and complete the Works in compliance with the projected timeframes, the Head of Department or his/her representative shall take action in terms of its his/her delegated powers and adopt and exercise one of the following courses wholly or partly, viz: -
- 28.3.1 To direct the Contractor, in writing, on any day named therein to suspend and discontinue the execution of the Works, and to withdraw himself and his workmen from the said Site or Sites,
- 28.3.2 To make a recommendation to the Accounting Officer for cancellation of the contract concerned.
- 28.3.3 To Contract or Contracts by calling for Bids or otherwise with any other Contractor or Contractors for the completion of the Works, or any part thereof, at such times and upon such terms as to the Department shall deem best.
- 28.4 In relation to the foregoing provisions the Department shall charge any sums of money which may be paid by the Department for completing the said Contract against the Contractor and if such amount shall exceed this Contract, then the Department shall have the right to recover such excess or any balance thereof from the Contractor by legal proceedings.
- 28.5 When correspondence is addressed to the contractor, reference shall be made to the contract number/ item number/s and an explanation of the complaint.

29 VALIDITY PERIOD OF BID AND EXTENSION THEREOF

- 29.1 The validity (binding) period for the bid shall be 120 days from close of bid. However, circumstances may arise whereby the Department will request bidders to extend the validity (binding) period. Should this occur, the Department shall request bidders to extend the validity (binding) period under the same terms and conditions as originally offered for by bidders. This request shall be done before the expiry of the original validity (binding) period.

30 VALUE ADDED TAX (VAT)

- 30.1 Bid prices must be inclusive of 15% VAT.
- 30.2 Bidders who make taxable supplies in excess of R1 million in any 12-month consecutive period are liable for compulsory VAT registration, but a person may also choose to register voluntarily provided that the minimum threshold of R50 000 (as of 1 March 2010) has been exceeded in the past **12-month** period. Bidders who meet the above requirement must register as VAT vendors, if successful, within one month of award of the bid.
- 30.3 For the purposes of calculating preference points, VAT shall not be considered during quotation process.



31 SERVICE LEVEL AGREEMENT

- 31.1 The successful Bidder and the Department will sign a Service Level Agreement (SLA) prior to commencement of works. A proposed schedule of works must be provided by the contractor for the approval of the Engineer within two weeks of receiving notification of a successful bid.
- 31.2 The *Special Terms and Conditions (STC)*, the *Standard Technical Specifications (STS)* and the *Project Specifications (PSS)* as listed in this bid document, together with the *Drawings*, are deemed to form part of the SLA.

32 COMMENCEMENT OF THE WORK

- 32.1 Site establishment must start within two (2) weeks, and the actual works within three weeks after hand-over of the site, provided that;
- 32.1.1 An official order has been issued;
- 32.1.2 The contractor is in possession of all relevant documentation required for works execution;
- 32.1.3 No exceptional circumstances such as inclement weather or other outside the control of either party to the contract prevail.
- 32.2 In case work has not commenced within two (2) weeks of the site hand-over and no attenuating circumstances for the delay can be provided, the Department reserves itself the right to cancel the contract.

33 HANDOVER OF SITE TO CONTRACTOR

- 33.1 The Department will organize a site hand-over to the contractor who will then be introduced to the project stakeholders and participants. The site handover will be the official start of the construction period, and the work will have to be completed within the period stipulated in clause 59 ("Completion period and rate of progress")
- 33.2 The site will be handed back at works completion after a final inspection by the Engineer revealed no outstanding patent defects.
- 33.3 The Contractor will control the site for the contract duration. Only the Contractor's own employees, Contractor's local labour and Departmental Representatives will be allowed on site.
- 33.4 The Contractor is responsible in the administration, control and security on the site at all times during the contract duration.

34 WATER AND POWER

- 34.1 The Contractor shall make the necessary arrangements for the provision of any water and power. No payment will be made for the provision or use of these services and the cost of these shall be included in the Bid/quoted amount.

35 LOCATION OF CAMP

- 35.1 The Contractor's camp may be erected on the site of the works but must meet the approval of the Engineer, project beneficiaries and landowners.
- 35.2 No persons other than a night watchman may sleep in the camp, without the approval of the local relevant Stakeholder.



36 HOUSING OF CONTRACTOR'S EMPLOYEES

- 36.1 The Contractor shall make his own arrangement for housing, payment and feeding his employees and transporting them to and from the site. However, it may be possible to arrange temporary local accommodation for the Contractor's staff with the participants.
- 36.2 The Contractor is in all respects responsible for the housing and transporting of his employees, and for the arrangement thereof, and no extension of time due to any delays resulting from this, will be granted.

37 LABOUR SOURCE & CAPACITY

- 37.1 The Contractor will be required to satisfy the Department that a sufficient and experienced labour force is employed or that sufficient experienced labour can be acquired to complete the services and produce an acceptable quality of workmanship.
- 37.2 The contractor is encouraged to source unskilled labour from the project participants or local community. The Contractor and the Departmental representative (Engineer or local Agricultural adviser) may negotiate with the participants in this regard to establish all the conditions for the utilization of the local labour.
- 37.3 The Contractor will be responsible for all hiring, payment, housing and transport of all labour used for the duration of the contract.

38 SECURITY & RISK

- 38.1 No one shall be allowed on the construction site after normal working hours except for the necessary security personnel.
- 38.2 The Contractor shall also be responsible for safeguarding all plants, machinery, equipment and materials on site. The Engineer shall not be responsible for any lost, damaged or stolen property or materials. Should any of these situations arise, no allocations will be made in terms of finances or time.

39 MATERIALS: DELIVERY, ON & OFF-LOADING, STORAGE & RESPONSIBILITY

- 39.1 The Contractor shall be responsible for the safe delivery, loading, off-loading, handling and storage of any equipment and materials on site.
- 39.2 All equipment, materials and plant stored on site must be suitably protected against damage or loss by theft or otherwise.
- 39.3 The Contractor shall remain fully responsible for all material and plant etc. until the completed works are handed over and have been officially accepted by the Department.

40 EXISTING ROADS, MUNICIPAL PAVEMENTS, ETC.

- 40.1 The Contractor is advised that he will be held responsible for any damage to the existing pavings, roads, municipal pavements, fences, boundary walls, etc., and will have to repair such damage at his expense



41 DAMAGE TO PROPERTY

- 41.1 If the Contractor or his/her employees, while engaged in the execution of the contract, shall break, deface, injure, destroy or allow to fall into disrepair any part of the Works or property belonging to the Department, or any private property including: buildings, paving, roads, fences, walls or grounds contiguous to the premises of the Department on which he or they may be employed, the Contractor will be required to repair, in a perfect and workmanlike manner, at own expense all damage to the approval of the Department. The Completion Certificate will not be issued until the Department is satisfied that all necessary remedial work has been satisfactorily completed
- 41.2 The Contractor shall take every precaution against damage or nuisance being caused by dust both to the properties of the Employer and all surrounding properties and shall indemnify the Employer against any claim that might arise there from.

42 UNDERGROUND CABLES AND PIPES

- 42.1 If such services are discovered, immediate notification must be made to the Employer and all work in the vicinity of such cables, pipes, etc., shall cease until safe to proceed.
- 42.2 Should the Contractor damage underground cable or pipes, such damage shall be repaired as soon and safely as possible by the Contractor.
- 42.3 The cost of making good such damage will be met by the Contractor as this must be covered by the Contractors works insurance.

43 DAILY RAINFALL RECORDS

- 43.1 Submission of rainfall figures is required for the granting of permission of extending the contract period on the basis of inclement weather. If none are kept, the Engineer is under no obligation to grant extension of the completion period for inclement weather.

44 INSPECTION OF WORK

- 44.1 The Departmental representative may at all reasonable times have access to the site where work is being executed for inspection purposes.
- 44.2 The Engineer may request that evidence of the quality or strength of any materials be supplied by the contractor wherever necessary.

45 NOTICE OF COVERING WORK

- 45.1 The Contractor shall give due notice to the engineer whenever any work or materials are intended to be covered in with earth or otherwise in order that their correct dimensions and quality may be ascertained before being covered.
- 45.2 If any such work or materials are covered without such notice having been given, the work or materials shall be uncovered at the Contractor's expense on instructions given by the Engineer.



46 SUB-CONTRACTED WORK

- 46.1 The contractor shall not sub-contract the entire contract.
- 46.2 Sub-contracting shall not relieve the contractor from any liability or obligation under the contract and she/he shall be liable for the acts, defaults and neglects of any sub-contractor, his/her agent or employees as fully as if they were the acts, defaults or neglects of the contractor.

47 INSURANCE

- 47.1 All accepted approved contractors would be required to provide the following insurances for the project awarded to them:
- 47.1.1 Insurance against damage, destruction or loss to 50% of the value of the contract.
- 47.1.2 Public Liability insurance.
- 47.1.3 All risks (works) policy and Political.

48 PROTECTION OF THE PUBLIC

- 48.1 Bidders including those sub-contractors and/or suppliers who are preparing prices/quotations for submission to the main bidder) must ensure that they make adequate financial provision in their bids for full compliance with the *Occupational Health and Safety Act (85/1993): Construction Regulations, 2014*, as published in the *Government Gazette* of 7 February 2014, or later amendments thereto. Financial provision shall therefore be made by each Bidder for, inter alia, the following:
- Carrying out and documenting risk assessments of all work to be carried out under the contract.
 - Preparation of safe work procedures.
 - Preparation of an H&S plan, discussing it with the Department, and then amending it as agreed.
 - Regular updating of all of the foregoing.
 - Provision of medical certificates of employees.
 - Provision of PPE and protective clothing for employees
 - Complying with all H&S requirements for the duration of the contract.
 - Provision of forced ventilation (as required when working in confined spaces).
 - The completion and checking of the safety file upon completion of the works and handing it over to the Department.
- 48.2 To enable the Department to appraise the allowances that Bidders have made for H&S in their bids, so that he/she can fulfil his/her obligations in terms of Clause 7 of the Construction Regulations, separate items have been included in the Bill of Quantities for Health and Safety.
- 48.3 Failure to submit realistic prices for the scheduled H&S items is likely to prejudice the bid.
- 48.4 The Principal Contractor and Sub-Contractors must submit proof of compliance with the OHS requirements.

49 INJURY TO PERSONS

- 49.1 The Contractor shall be liable for and shall indemnify the department in respect of any liability, loss, claim or proceedings whatsoever, whether arising in Common Law or by Statute in respect



of personal injuries to or death of any person whomsoever arising out of or in the course of or caused by the execution of the Works.

50 DISAGREEMENTS

- 50.1 Notice of disagreement. The Contractor has the right by written notice to the Engineer to require him to consider any disagreement which he raises with the Engineer provided the said written notice shall be given within 14 days after the cause of disagreement has arisen.
- 50.2 Ruling on disagreements. The Engineer shall give a ruling on the disagreement in writing to the Contractor no later than 14 days after his receipt of a written request from the Contractor requiring him to do so. The Engineer shall provide such a ruling with as little delay as possible. During the response time the Contractor shall not alter the status of the works under contention.

51 FIXED PRICE CONTRACT

- 51.1 The contract shall **not** be subject to contract price adjustment.

52 PRICING - COMPLETENESS OF BID

- 52.1 Bidders are required to Bid for all services, products and commissioning as specified in this document and associated plans. If he/she does not bid on all items, his/her bid will be rejected.
- 52.2 All bid/quoted prices for separate items are to be in South African currency and must **exclude** VAT.
- 52.3 All items as described in the project specification are to be priced in full.
- 52.4 Transport/Delivery costs must be included in the pricing if the Pricing Schedule does not list them separately.
- 52.5 VAT must be filled in as the sub total followed by the complete price for the entire project.
- 52.6 The Bid price page must be signed by a person legally authorized to do so.

53 QUANTITIES OF WORK

- 53.1 The Contractor shall receive payment only for the works actually executed and approved by the Engineer.

54 PROGRESS PAYMENTS

- 54.1 Payment shall only be made for claims that are commensurate with the works actually executed and complete.
- 54.2 Payment will only be made against the construction progress as pertaining to **built /installed** items. Movable items and materials on site are generally excluded from progress payments until they have been fully installed or fitted or built up.
- 54.3 If any item or part of an item in an invoice is disputed, the Engineer shall give notice to the contractor explaining the disputed item and request for re-measurement.
- 54.4 Part payments will be made after the Engineer has approved the work and will be made in accordance with the Retention clause (58).
- 54.5 The penultimate payment occurs after practical works completion. The final payment will be made after the 6 months liability period when the contractor has dealt with all defects, if any.



55 COMPLETION OF THE WORKS

55.1 Work completion will be established over three stages.

55.1.1 **Practical completion** - This is defined as the stage when the works are found to be substantially complete and can be used for the purposes intended. This assessment will be solely made by the Engineer. When the Contractor thinks he has completed the works, an inspection will be made by the Engineer who will draw up a list of patent defects, commonly known as a "snag list", if any. Patent defects are defects that are visible or discoverable upon an ordinary and proper inspection.

55.1.2 **Works completion** - This stage will be reached after the Contractor has, to the sole assessment of the Engineer, fixed all defects listed on the snag list. It is at works completion that the Contractor will be paid out 50% of his/her retention money.

55.1.3 **Final completion** - Final Completion occurs 12 months after Works completion, after expiry of the liability period.

56 RETENTION

56.1 A 10% retention will be withheld on payment for duration of the construction.

56.2 The Department will pay out half of this retention, or 5% of the bid value as part of the second last payment at **works completion** of the works. The remainder, viz 5%, will be paid out at **final completion** after expiry of the defect liability period (12 months after practical completion), the bidder having eliminated all defects.

56.3 In some instances, the Engineer may decide to shorten this period in order to allow all payments to be completed within the financial year. However, this is **not** a given and the Contractor will be notified during the course of the construction if such would be the case.

57 DEFECT LIABILITY PERIOD

57.1 The defect liability period is 12 calendar months calculated from the date of works Completion.

57.2 The contractor shall unconditionally guarantee all materials, workmanship related to the works for that period. The guarantee shall cover any defects due to inferior materials and/or workmanship of the Contractor, or any of his sub-contractors, fair wear and tear excepted. The Contractor shall repair, remedy or replace any such defects, part or complete works without delay and at his own cost.

58 CONTINGENCIES

58.1 An amount of 10% of the subtotal for all materials, equipment and services has been set aside for Contingencies. This allowance will only be accessed for unforeseen additional expenditure not covered in the contract. Such approval must be in line with SCM Delegations.

59 PERIOD OF COMPLETION & RATE OF PROGRESS

59.1 The project has to reach practical completion **within 4 calendar months** of award of the contract (120 calendar days)

59.2 If the Works are delayed by any cause beyond the Contractor's control, the Contractor shall have the right within twenty-one days of any such cause of delay arising, to apply in writing to



the Department to extend the date of completion, stating the cause of delay and period of extension applied for.

- 59.3 The Department upon receipt of such written application may by order in writing extend such date of completion by a period to be determined, or may refuse to extend such date of completion, or may postpone giving a decision upon such application until completion of the Contract period set out in sub-clause (1) of this clause.
- 59.4 The date of completion will be extended only to the extent approved by the Department.
- 59.5 Should the Contractor fail to apply in writing for an extension within the time set out above, or should the Department refuse to grant any extension in writing, then the Contract period provided shall not be exceeded.
- 59.6 When the Works are completed the Department will give a completion certificate and the date of such certificate shall be the date of commencement of the guarantee period.

60 PENALTY CLAUSE / FINES FOR LATE OR NON-COMPLETION

- 60.1 If the contractor does not complete the work within the time stipulated and no extenuating circumstances can be given for the delay, the Department may impose a fine as detailed below. The total will be subtracted from the retention allowance.
- 60.2 If the contractor fails to complete the works and the Department is forced to employ another contractor to complete the works, the defaulting contractor will be held liable for the costs as far they exceed the original total Bid value.
- 60.3 The department will deduct a penalty for late completion of up to 0.05% of the contract value per working day delay. This will be deducted from the retention.



TERMS OF REFERENCE

1 ENGINEERING

1.1 Design

The design of the Permanent Works has been undertaken by the Engineers. The Contractor will be expected to supply the design for the control panel suitable to control the supplied electric motors. The contractor will also be required to conduct designs for temporary works, the works to be approved by the responsible engineer prior to construction.

1.2 Drawings

1.2.1 General

- The drawings contained in this tender document form part of the tender documents and shall be used for tender purposes only. At the commencement of the contract, the Engineer will supply the Contractor with detailed soft copy drawings for construction. These copies will be issued free of charge and the Contractor shall make prints he/she may require at his/her own cost. 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. The work shall be carried out in accordance with the latest available drawings revisions.
- Any information in the possession of the Contractor necessary for the Resident Engineer to complete his as-built drawings shall be supplied to the Resident Engineer before a Certificate of Completion will be issued.
- Only figured dimensions shall be used and drawings may not be scaled unless instructed by the Project Engineer. The Engineer will supply any dimensions, which may have been omitted from the drawings.
- The levels given on the structural drawings are subject to confirmation on the site, and the Contractor shall submit all levels to the Engineer for confirmation before he commences any structural construction work. The Contractor shall also check all clearances given on the drawings and shall inform the Engineer of any discrepancies.

1.2.2 List of Contract Drawings prepared by Engineer

The construction drawing for the project have been prepared by the Engineer. The summary list of drawings are as follows in the table below.

Drawing Number	Drawing Description
PSY/lrr/2022/01	Overview plan for the applicable area
PSY/lrr/2022/02	Pump station layout
PSY/lrr/2022/03	Typical cluster valve connection
PSY/lrr/2022/04	Typical air valve connection



2 SOIL TESTING

The soil analysis should include but not limited to the following:-

- Soil texture, structure and consistency;
- Irrigability classes presented in a map;
- Porosity;
- Infiltration characteristics/rate (Initial and final rate);
- Permeability;
- Water holding capacity, and
- Natural Soil depth.

The report should present all the findings relating to the above requirements and provide all necessary recommendations deemed applicable to this irrigation development.

Please note that the quote should comprise the methodology (technical proposal) and financial proposal/breakdown. The financial breakdown should include fees for all the field tests, laboratory tests, data analysis, report writing, disbursements including travelling and any other costs that may be incurred.

3 PROJECT PARTICULAR SPECIFICATION

The following project particular specifications are applicable to the specified operations.

3.1 PPS1 Pumps houses (Civils)

The proposed pump house is to be constructed using the following specifications:

- The new pump station to be maximum 6m²,
- Water to be abstracted from a borehole
- The walls are to be constructed using double layer clay bricks with louver ventilation.
- The new pump stations to be fitted with a transformer room steel door type CV with ventilation and Louver windows as shown in the pump house drawing.
- The new pump stations to be roofed with a 150mm reinforced concrete slab, using rib and concrete blocks, lintels and Ref 395 wire mesh.
- Pump house to be constructed according to NHBRC guidelines for buildings.

3.2 PPS2 Pumps (Mechanical)

Supply install and commission the new pumping system with all the necessary fittings

- Pumps shall have a discharge of between 60m³/hr and the head of 85m as per bill of quantities.
- Tenderer to provide the pump information such as (pump type, curve, impeller diameter etc.) for approval by the responsible Engineer prior to procurement and delivery.
- The above units to be mounted together on a steel base plate fasten to the foundation using bolts and nuts.



- The associated pipe work with necessary fittings and valves. These to be primed and painted with two coats of Coupon 8048 or equivalent.
- Pressure gauges with complete associated fittings.
- The pumps to be self-priming.

3.3 PPS3 Pump motor and electrical (Electrical)

- The electric motors to be directly coupled to the pumps stated above.
- The electric motors (3kW, 2pole) to drive the pumps to be running with efficiency rating of minimum IP55 (IE2) or above. Tenderer to provide the motor information prior to procurement for approval by the responsible engineer.
- The motors are to be fitted with suitable control panels or switchgears with pressure sensors, no flow switches (dry run protection), overload, lightning and low voltage protection.

3.4 PPS 4 Air Valves (Double and triple purpose air valves)

The double purpose air release and vacuum break valves shall be ARI type as specified or similar approved. Double purpose air valves shall be able to release appropriate volumes of air (for instance during the pumping process) and let appropriate volumes of air into the system when needed.

3.5 PPS5 Drawings

- The drawings issued to tenderers 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 executed in accordance with the latest available revision of the drawings approved for construction.
- At the commencement of the contract, the Engineer shall deliver to the Contractor copies of the construction 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 or revisions for construction purposes as may be necessary for the adequate construction, completion and defects correction of the works.

4 GENERAL TECHNICAL SPECIFICATIONS

4.1 Applicable Standardized Specifications

Although not bound in or issued with this document, the following SANS 1200 Standardized Specification for Civil Engineering Construction as approved by the Council of the South African Bureau of Standards shall apply to this Contract. The Contractor shall be in possession of these Standardized Specifications and their related SANS 0120 Code of Practice that apply equally and shall keep a copy of each on site for reference by him and the Engineer for the duration of the Contract.

For "Workmen's Compensation Act" read "Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993)" wherever it appears. For "Machinery and Occupational Safety



Act" and "Mines and Works Act" read "Occupational Health and Safety Act, 1993 (Act 85 of 1993)" wherever they appear. In general, the Specifications published by the South African Bureau of Standards (SANS/SANS), series 1200 (Standardised Specifications for Civil Engineering Construction) shall apply. For "maintenance period" read "Defects Liability Period" in terms of Clause 53.1 of the General Conditions of Contract for Construction Works 2004, wherever it appears.

SANS 1200 Specifications applicable are:

SANS 1200 A	– 1986	:	General
SANS 1200 C	– 1980 (19 May 1982)	:	Site Clearance
SANS 1200 DA	– 1988 (as amended 1990)	:	Earthworks (Small Works)
SANS 1200 DB	– 1989	:	Earthworks (Pipe Trenches)
SANS 1200 GA	– 1982	:	Concrete (Small Works)
SANS 1200 GE	– 1984	:	Precast Concrete (Structural)
SANS 1200 HA	– 1990	:	Structural Steelwork (Sundry Items)
SANS 1200 LB	– 1983	:	Bedding (Pipes)

Copies of SANS 1200 Standardized Specifications are available from the South African Bureau of Standards, Private Bag X191, Pretoria, 0001. In addition, the following Occupational Health and Safety Regulations (No 85 of 1993) are applicable: -

- General Safety Regulations
- Environmental regulations for workplaces
- Facilities regulations

4.2 Preliminaries and General

The contractor is to note that all insurances (UIF, workman's compensation, works, public liability etc.); site and equipment safety; site establishment and security; services (water and electricity); testing of materials and any specialist services are for the contractor's responsibility and attention throughout the contract duration until handover of the project. Please also refer to general conditions of contract. The Department reserves the right to stop progress of the works until these conditions are complied with.

4.3 Earthworks and Site Preparations

Normal regulations regarding safety, municipal by-laws, contamination of water sources, erosion, siltation etc. will still apply.

- Site preparations & establishment: SANS 1200 AA (4).
- Setting out of works: SANS 1200 AA (5.1.1)
- Permissible deviations: SANS 1200 GA (6.4) Degree of accuracy II for all bases.
- The site must be cleared and stripped of all plant materials, roots and topsoil.
- The cleared and stripped material is to be stockpiled away from the construction site and is to be levelled/replaced once all construction is complete.
- The site is to be levelled prior to any construction. This includes excavation of in situ material to provide the pit.



- Materials excavated and suitable for backfilling will be placed in even, thin layers and compacted with thickness applicable to the compaction method/machinery used but not exceeding 150mm.

5 HEALTH AND SAFETY

The work under this contract is defined as “Construction Work” and regulated under the Occupational Health and Safety Act, 1993 (latest amendment) and the Contractor shall adhere to all the legislative requirements as per Construction Regulations 2003. The Contractor shall provide for the cost of the health and safety measures in the Schedule of Quantities. The Contractor shall notify the Provincial Director in writing of the construction activities before work commences, if required.

The Site Representative shall be present on site during working hours and any orders or instructions, which the Engineer may give to the Site Representative, shall be deemed to have been given to the Contractor. The Contractor shall develop and demonstrate to the Employer a suitable and sufficiently documented Health and Safety plan based on the safety specification. The Contractor shall if called upon to do so, submit a preliminary Health and Safety Plan, failing to do so may lead to the disqualification of this tender.

5.1 Health and Safety Specification

- a) The Contractor shall appoint and notify the Engineer in writing, a competent Site Representative, with the duty of supervising the construction work.
- b) The Contractor shall appoint, and notify the Engineer in writing, a competent person to perform a risk assessment before construction work commences, during construction work and which shall form part of the Health and Safety Plan.
- c) The Contractor shall appoint and notify the Engineer in writing, a competent person responsible for the preparation of a fall protection plan, amending, maintaining and adherence thereto.
- d) The Contractor shall execute the necessary steps to prevent uncontrolled collapse of new or existing structures and no part shall be loaded in a manner that would render it unsafe.
- e) The Contractor shall appoint and notify the Engineer in writing, a competent person responsible that all formwork and support work structures are adequately designed, erected, supported, braced and maintained.
- f) The Contractor shall appoint and notify the Engineer in writing, a separate competent person with relevant experience for each of the operations whose first duty will be to, and who shall, supervise all stages in the operation. The operations are:
 - i) Excavation, blasting and trimming of the excavations, backfilling and formation of embankments.
 - ii) Supply of concrete aggregates and the batching, mixing, transporting, placing, compacting and curing of concrete.
 - iii) Loading, unloading, transport and installation of steel pipes including areas where pipe jacking has occurred.
 - iv) Cutting and welding of steel pipes



- v) Installation of valves, dirt boxes and water meters
- g) All scaffolding shall comply with the Occupations Health and Safety Act 1993 (latest amendment).
- h) The Contractor shall appoint and notify the Engineer in writing, a competent person responsible for suspended platform and that all erectors, operators and inspectors are competent to carry out their work.
- i) Every material hoist and its tower shall be constructed of sound material in accordance to the Construction Regulations 2003 (latest amendments).
- j) All explosive power tools shall comply to and be in accordance to Construction Regulations 2003 (latest amendment).
- k) Notwithstanding the provisions of the Driven Machinery Regulations (Government Notice No. R533, latest amendment), the Contractor shall ensure that work is carried out in a safe manner where tower cranes are used.
- l) The Contractor shall ensure that all construction vehicles and mobile plant are maintained, operated and used in a safe manner by competent operators.
- m) Notwithstanding the provision of the Electrical Installations Regulations (Government Notice R2920 latest amendment) and the Electrical Machinery Regulations, (Government Notice R1953 latest amendment), the Contractor shall take the necessary steps to provide a safe environment for construction work to proceed.
- n) Notwithstanding the provisions for the use and storage of flammable liquids as determined in the General Safety Regulations (Government Notice No. R1031, latest amendment), flammable liquids shall be stored in such a manner to prevent fires and explosions.
- o) The Contractor shall provide lifejackets for workers where construction work is done near or over water.
- p) Notwithstanding the provisions of the Environment Regulations for Workplaces (Government Notice No. R2281, latest amendment), implement and maintain suitable housekeeping.
- q) Notwithstanding the provisions for the stacking of articles in the General Safety Regulations (Government Notice R1031, latest amendment) the Contractor shall appoint a competent person in writing, responsible for supervising all stacking and storage on site.
- r) Subject to the provisions of the Environment regulations for Workplaces (Government Notice No. R2281, latest amendment), the Contractor shall take appropriate measures to avoid risk of fire.
- s) Notwithstanding the provisions of the Facilities Regulations (Government Notice No. R1593, latest amendment), the contractor shall provide clean and maintained facilities as required.
- t) The contractor shall take all reasonable steps to ensure co-operation between all sub-contractors to enable each sub-contractor to comply with provisions of the Act.



6 MATERIALS AND CONSTRUCTION

ALL MATERIALS MUST BE IN ACCORDANCE WITH THE FOLLOWING SANS AND ISO STANDARDS.

6.1 PS7.1 Pipelines

- ALL STEEL FITTINGS TO BE GRADE 300WA STEEL, PN16, UNLESS OTHERWISE SPECIFIED.
- GROOVE ENDED STEEL PIPE : SANS 815-2
- STEEL PIPES : SANS1182
- UPVC AND MPVC : SANS 966:1 AND SANS966-2
- HDPE : SANS 4427
- SEAL RINGS : SANS 4633
- BENDS : SANS 966:PART1 & PART2
- UPVC pipes and fitting shall be fitted with spigot and rubber socket ring joints and shall comply with requirement of SANS 966.
- All materials must conform to SANS specifications for the products. This includes all items such as pipes, valves, flanges, accessories etc.
- Test pressure shall be performed as stipulated in SANS for test pressure.
- All construction works must conform to the applicable standard specifications and installation requirements as per NBR requirements and manufacturers recommendations.
- All concrete works to conform to Cement & Concrete Institute Standards and Recommendations.

6.2 Standard Concrete Mixes:

- Mixing, pouring and curing of concrete: SANS 1200 GA (5.4)
- Materials: SANS 1200 AA (3); SANS 1200 GA (3)
- Cement: Commencement 32,5N or R to SANS 50197-1
- Testing: SANS 1200 AA (7); SANS 1200 GA (7)
- Quality control through the slump test SANS 1200 GA (5.4.1.2) SANS method 862. The contractor is to supply the slump testing equipment.
- Tolerances to SANS 1200 GA (6.4)
- Formwork: Refer to SANS 1200 GA (4.4; 5.2)
- Reinforcing: SANS 1200 GA (5.1)

Refer to standard concrete mix's specification

6.3 Flanges and Accessories

Flanges shall comply with the requirements of SANS 1123 latest edition. Flanges designed for rated working pressures of less than 1600kPa shall have flat flange faces and those for equal or greater working pressures raised flange faces.



It shall be the responsibility of the Contractor to ensure that the flanges on pumps, valves, fittings, specials and pipes, which shall be fitted together, are fully compatible. The flanges shall be drilled to the relevant table or to match existing flange drillings if applicable.

Before the machined surfaces have become affected by rust, they shall be coated with a mixture of white lead and tallow or other approved protective composition.

6.4 Flange Jointing Material

All flanged jointing material shall be approved by the Engineer before erection is commenced. Insertions for flat flange faces shall be of the full flange diameter encompassing the bolts. Insertion for raised flanges shall fit neatly inside the bolt rights.

All packing must be cut from rubber insertions (for pipe diameters 300 mm and smaller) with a nominal thickness of 3,2mm according to SANS 564-1973. The inside and outside diameters should be according to SANS 1123-1977. For pipe diameters, exceeding 300 mm Klingerrite gaskets should be used to the applicable specifications.

6.5 Bolts and Nuts

All nuts, bolts, studs and washers shall comply with SANS 135:1985 and shall be hot dipped galvanised according to ISO 1461. No bolts or studs of less than the size indicated on the drawings shall be used. The length of each bolt shall be such that after tightening between one thread and one diameter in length projects through the nut and at least one full thread in addition to the thread run-out remains clear between the nut and the unthreaded shank.

The threaded portion of bolts shall be clear of the shear plane. All nuts and studs shall be locked in position by lock-washers and where necessary, locknuts. High tensile bolts and nuts should be used to couple the flexible hoses to limit the rust-effect on these very important elements when the pump units have to be moved.

6.6 Gate Valves and Scour Valves

Resilient seal gate valves (RSV) shall be similar to VOSA configuration and shall comply with SANS 664 (latest amendment) with classes and flanged drillings as scheduled in the bill of quantities. Where plain-ended valves are required, the ends shall be suitable for the type of pipe specified. The valves shall be designed for drop tight closure over the full range of pressures from zero to maximum working pressure.

The valves shall be provided with a straight unobstructed body passage without pockets. The spindle seat shall consist of 2 nitrile rubber O-rings located in a corrosion resistant housing. A wiper ring shall also be provided. The gates shall be completely rubber covered. The gate guides shall be of the tongue and groove type. Spindles shall be manufactured on solid stainless steel and shall be of non-rising type. The body of the valve shall be coated to a minimum DFT of 250 microns.



Extension spindles and brackets shall be provided where detailed and hand-wheels shall be clearly marked with the direction of opening. All valves shall be clockwise opening/closing. Gearing shall be chosen to limit the total effort at the hand-wheel or valve key to 350 Newton's.

6.7 Butterfly Valves

All butterfly valves shall be similar to AMRI configuration and must be provided with a gearbox and hand-wheel mechanism unless otherwise detailed and it must be possible to install the unit between flanges drilled according to SANS specifications. Valves are to have a stainless steel stem and are to incorporate a resilient disc seal mechanically retained around the periphery of the valve disc. Working pressure required is 1000kPa, or as detailed in the Schedule of Quantities and/or the drawings.

6.8 Non Return Valves

All wafer type non-return valves may have a cast iron body, but stainless steel plates having machined sealing faces, 316 stainless steel pin and springs, nitrile seat and Teflon or similar bearing washers.

6.9 Pressure Gauges

Pressure gauges shall comply with BS 1780 or equivalent for Industrial Gauges shall be calibrated in kilopascals and shall be not less than 100 mm diameter. Full-scale reading shall be between 1.5 and 2 times the maximum actual operating pressure except where otherwise specified.

All gauges shall be suitable for continuous operation and shall be liquid filled where fluctuations in pressure may cause damage.

Where blockages of the gauge are possible, diaphragm seals with large bases and a facility for cleaning shall be provided. This shall apply in all cases where liquids bearing solids or sludge are handled.

Gauges shall not be mounted directly on equipment subject to variation. For dry locations indoors, the casing may be plastic or epoxy coated aluminium. For damp indoor locations, particularly in any location where sewage is flowing, and for all locations outdoors, the gauges shall be weatherproof and have AISI 316 stainless steel cases.

Isolating and bleed cocks shall be provided for each pressure gauge, except on installations for hazardous fluids.

6.10 Pumps and Motors

6.10.1 Guarantee

All pumps and motors must carry a guarantee of twelve months. The pump and motor must be capable of reaching the required pressure. The pump must be free of any defects pointed out by the engineer or client.



6.10.2 General

- Pumps to be provided shall include power rating, rotational speed/rpm and efficiency.
- Pumps shall be silent and vibration free during operation.
- No pump shall be started before installation of strainers.
- Pumps shall be provided with adequate protection over inlet and outlet flanges before being delivered to site. Protection covers shall be able to withstand normal handling during construction.
- Pumps shall be suitable for the fluids and fluid temperature that they handle and shall be selected accordingly. See pump data forms in this regard.
- Manual vent valves shall be provided at high points on the pump casings. For applications with temperatures above boiling point, the vent must be piped to a safe drain point.
- Drain plugs shall be provided at low points on the pump casings.

6.10.3 Couplings, Base Plate and Alignment

- The power source and pump must be connected by means of a coupling which can transmit the full power supply of the power source, whether or not a spacer is used, or as specified in the Bill of Quantities. All couplings should be safeguarded to prevent to prevent injury to operators.
- Pumps shall be complete with flexible drive couplings to allow for angular and axial misalignment where applicable.
- The pump and power source must be mounted together on a base plate and the required tolerances:
 - Maximum permissible axial alignment error – 0.03mm
 - Maximum permissible radial alignment error – 0.05mm
- After installation and before commissioning the alignment must again be checked and adjusted with shims.
- Pumps shall be aligned by a representative of the pump supplier, but the contractor still remains solely responsible for the guarantee period.
- The tolerances of measurements of the base plate, as indicated by the tenderer in the tender document, must be approximately 2mm.
- Pump drives shall be suitably protected by a securely mounted sheet metal guard and comply with Machinery and Occupational Safety Act (Act 611983).
- Each flexibly coupled pump shall be provided with a cast iron or fabricated steel base plate of ample size to hold both pump and motor in correct alignment. The pump and motor shall be accurately aligned when running at normal temperature. Dowel pins shall be fitted to base plates after alignment.
- Couplings shall be selected to match at least the power of the electric motor and shall not impose any restriction on the normal expansion and tolerances.

6.10.4 Pump Installation

All pumps are to be installed in accordance with the Manufacturers specifications. The rate for installation and commissioning of pumps must include for all nuts, bolts, base plates or straps that are required for their fixing, according to the Manufacturers specifications.



6.10.5 Standard Specifications

The workmanship must be of the highest standard throughout and be done according to the most modern practices. All inferior work will be replaced or rectified, as soon as it is pointed out by the engineer, at the cost of the contract.

6.10.6 Inlet and Outlet Adapters

These form part of the selection of the tender with the necessary nuts, bolts and gaskets for coupling to the pump, and flanged to fit the large end of the steel piping. Suction reducers should be eccentric and conform to a length equals to $5(D1 - D2)$.

6.10.7 Safety Precautions

All necessary safety covers must be supplied to ensure total protection of the operator.

6.11 Electrical

All electrical work is to be carried out to the relevant SANS standards and in accordance with all regulations. Test and compliance certificates must be provided.

6.12 Commissioning

Should any defects in the equipment become apparent during commissioning or during maintenance accounting; it will be the suppliers' responsibility to replace such faulty equipment.

6.13 Operation and Maintenance Manuals

Sets of documents are to be provided that include the following:

- Operational manual
- Design data where applicable
- Pump and motor data forms and curves
- All technical data and information sheets for equipment and materials

6.14 Protection of Power Lines

Before any excavation is carried out within an electrical servitude or reserve the Contractor notifies the relevant authority that the work inside the servitude or reserve is to commence and the Contractor ascertains any regulations or conditions required by the authority for working in the vicinity of its services.

The use of cranes, excavating machinery and mechanical Equipment is restricted in the vicinity of an overhead power line. The Contractor allows for the work beneath a power line to be carried out manually and to proceed at a slower rate than that of the normal trench and that of the excavation, Blasting and backfilling is in accordance with the regulations prescribed by the authority and subject to the continuous supervision of an official of the authority.

The Contractor takes special care when excavating the trench not to damage the underground cables associated with each power line or disturbs the stability of any tower or pole supporting the



power line. The Contractor is responsible for the protection of the cables, towers and poles and liable for any claim for damage arising from his operations.

6.15 Risk Management

The Contractor ensures that his risks are managed to enable the successful execution of the project. The Contractors' risk that occurs or develops during construction is brought to the Employer's attention in writing immediately. A risk register must be kept for the duration of the project.

A general risk analysis is performed prior to starting with the construction work, which must form part of the Safety Plan. All work will be carried out in conformance to the Occupational Health and Safety Act, 1993 (latest amendment) and the Contractor shall adhere to all the legislative requirements as per Construction Regulations 2003.

7 DELIVERABLES AND WORK BREAKDOWN STRUCTURE

The Contractor shall be responsible for the provision of the following deliverables and work, which in turn must comply fully with the supplied drawings, schedule of quantities, the Engineers applicable specifications, and in particular the specification supplied as part of the Tender:

7.1 PHASE 1: COMPILATION AND SUBMISSION OF PRELIMINARY DOCUMENTATION

- **Detailed Project Programme:** Provide the Engineer with a detailed project programme within 14 (fourteen) days of signing of the Contract.
- **Declaration of Insurance:** Submit to the Engineer the completed Schedule: Declaration of Insurances, together with copies of the insurance policies concerned within 14 (fourteen) days of signing of the Contract.
- **Surety:** Provide to the Engineer a surety, issued on an official letterhead of a bank or insurance company having an office in the Republic of South Africa, within 14 (fourteen) days of the signing of the Contract.
- **Appointment of OHS Site Representative:** Submit to the Engineer a copy of the appointment and acceptance document; of the full-time employee that shall be the Contractor's Site Representative in terms of the OHS act requirements within 14 (fourteen) days of the signing of the Contract.
- **Health and Safety Plan:** Compile a Health and Safety Plan in compliance with the OHS ACT and construction regulations, 2003. This document shall be submitted to the Employers Site OHS Officer for approval, within 14 (fourteen) days of the signing of the Contract. A copy of the approved document shall be submitted to the Engineer.
- **Risk Assessment Plan:** Submit to the Engineer a comprehensive risk assessment plan, within 14 (fourteen) days of the signing of the Contract.
- **Quality Assurance Plan:** Submit to the Engineer a comprehensive proposal for a quality assurance plan (in accordance with the requirements of SANS – ISO 9001), within 21 (twenty one) days of the signing of the Contract.



- **Team Members Document:** Submit to the Engineer a team member list, within 14 (fourteen) days of the signing of the Contract, which has at minimum the following information:
 - Team member's name.
 - Team member's ID numbers and copies of ID documents.
 - Team member's job description.
 - Team member's qualifications, certifications and experience.
 - Team members contact details.
- **Site Induction:** The Contractor must ensure that all his site construction management and supervision team, including the labour force and plant operators have undergone a medical assessment in accordance with the OHS Act with respect to their roles on site. These medical assessments must be submitted to the Engineer and or the the Employer's safety officer for his acceptance prior to any body mobilizing or starting work on site.
- **Site Access Certificate:** Following approval of the Health and Safety Plan submitted to the Employer Site OHS Officer, obtain a Site Access Certificate from the Site Executive Manager

7.2 PHASE 2 – SITE ESTABLISHMENT AND BUILDING CONSTRUCTION

- Establish on site as per arrangement between the landowner and the contractor in writing. The agreed site shall be marked on a Map or else co-ordinates provided to the Engineer.

7.3 PHASE 3 – PROCUREMENT, PREPARATION, TESTING AND DELIVERY PHASE

- Procurement of all equipment needed including, but not limited to valves, and all piping and fittings.
- The preparation of Inspection and Factory Acceptance Testing of the pipe work and fittings, in conjunction with the Engineers personnel at the place of manufacture.
- Preparations for and delivery of all equipment to site as per specifications. All equipment delivered to site shall be safely stored by and shall be the responsibility of the Contractor Preparations for and delivery of the approved spares and tools to stores or workshops.

7.4 PHASE 4: INSTALLATION AND COMMISSIONING PHASE

Excavate a 2800m long, and an average 0.45m wide and 1.2m deep, trench.

- Supply and install all bends, sluice valves, and scour valves, air valves with vacuum break valves, reflux valves, butterfly valves, and pipe work connections at the start, the end and at the pumping station along the pipeline
- Backfill the trench with fill and dispose of surplus material and reinstate the topsoil and surface area.
- Construct and/or install cluster valves and all associated steel work required within the clusters.
- Pressure tests the completed pipeline (witnessed by the Engineers Representative) as required by the OHS Act and regulations. All compliance certificates must be provided to the Employer.



- Obtain a Construction Acceptance Certificate from the Engineer after completion of the construction, Installation and preliminary commissioning work.
- Successfully commission and put the complete pipeline in to operation in conjunction with the Engineers staff.

7.5 PHASE 5: PROVING PERIOD AND PERFORMANCE TESTING PHASE

- Monitor, maintain and correct any defects on the pipeline during a Proving Period for the duration specified in this tender document.
- Provide training for Operation and Maintenance personnel, at dates and times that suite the Employer so that all appropriate staff are trained.
- Successfully conduct performance testing of the pipeline. This testing must be undertaken in conjunction with the Engineers staff.

7.6 PHASE 6: HANDOVER (INCLUDES COMPLETION AND SUBMISSION OF FINAL DOCUMENTATION)

- Update to as-built status, and submit to the Engineer (for approval), all drawings and required documentation.
- Obtain Completion Certificate from the Engineer after the entire pipeline has been finally handed over to the Employer (this is subject to the applicable conditions for signing of the Handover Certificate).
- Correct any defects that arise on the pipeline during the specified Defects Liability Period.
- Obtain the Final Certificate from the Engineer after successfully completing the Defects Liability Period (this is subject to the applicable conditions for signing of the Final Handover Certificate).

8 TECHNICAL SPECIFICATIONS

8.1 EARTH WORKS, PIPE LAYING, AND ASSOCIATED CIVIL WORKS FOR THE CONSTRUCTION OF STEEL PIPELINES AND FITTINGS

GENERAL REQUIREMENTS

Under this Section of the contract the Contractor shall:

- (i) Identify and check the conditions of the steel pipes stored at the Steel pipe Manufacturer. Any pipes that are defective are to be reported to the Engineer. Agreement is to be reached as to how these defective pipes are to be repaired and the price of the repair.
- (ii) Arrange for the loading, transport and unloading of pipe from the same address as mentioned in (i) above to alongside the trench for the pipeline.
- (iii) Supply, transport and unload of pipe specials, valves and applicable instrumentation to alongside the trench for the pipeline and temporary lay-down area.
- (iv) Identify, establish and prepare to the satisfaction of the Engineer, temporary lay-down areas for the pipes currently being delivered. These lay-down areas do not include the working strip next to the pipeline route.
- (v) Arrange for the unloading of pipes from the trucks, currently being delivered to prepared lay-down areas along the pipe trench from the supplier's vehicles.



- (vi) Identify and check the conditions of the steel pipes as they are delivered to site from the manufacturers. Any pipes that are defective are to be reported to the Engineer and arrangements made with the Pipe Manufacturer for its repair.
- (vii) Arrange for the loading, transport and unloading of pipe, pipe specials, valves and applicable instrumentation from lay-down area to alongside the trench for the pipeline.
- (viii) Install the pipes in the trenches and make the necessary joints including the flanged joints at isolating valves.
- (ix) Fabricate bends and install and form horizontal and vertical sets where shown on the drawings using steel pipe supplied by contractor's source approved by The Engineer. This includes the fabrication of bends that are over 15°. The Contractor will check these manufactured bends and install them according to the drawings.
- (x) The Contractor shall supply the special steel pipe sections scheduled. This will include:
 - Tees for air-valves and flanges.
 - Reducers for the valve chambers and flanges
 - Tees for the cross connections.
 - Tee for a future off-take.

Install the special pipe sections.

- (xi) Provide equipment and material and carry out radiographic examination of welded joints.
- (xii) Install all isolating, by-pass scour and air valves.
- (xiii) Make good the external bitumen fibre wrapping or polyurethane coating, internal epoxy lining at joints and clean out the pipeline.
- (xiv) Rectify defects in the pipeline during construction and for a period of 12 months after the final date of the acceptance of the contract.

8.2 LOADING, TRANSPORTING AND UNLOADING OF PIPES

- The steel pipe manufacturer could deliver pipes to a temporary storage yard at the construction site prior to the laying contractor being appointed. These pipes would have been checked, unloaded and stored by the Employer. The Contractor shall check these pipes to ensure that they are in acceptable condition. Should any faults be found these are to be reported to the Engineer who will determine the remedial action required. Two weeks after the award of this contract the steel pipe manufacturer shall start to arrange for future pipe deliveries to be transported from the manufacturing plant to the temporary lay-down areas prepared by the Contractor along the route of the pipeline, or at specific areas or stringed along the working strip – which is applicable.
- The Contractor shall examine visually and by means of the appropriate detectors, on arrival of the pipes prior to off-loading, the external coating and internal lining of all pipes in the presence of a The Engineer representative. Any defects must be recorded and shall be repaired by the pipe supplier.
- The Contractor shall unload the pipes from the supplier's trucks and lay them down in the temporary indicated lay-down area and/or certain positions along the route of the pipeline on sand bags.



- The Contractor shall load the pipes from the lay-down area, move them to the excavated trench and string them along the trench until required.
- The pipes at all stages, shall be protected against damage, and shall be lifted by means of approved broad-band slings and spreader beams.
- The use of chains, wire ropes, etc., will not be permitted and the pipes shall be supported on pipe storage mounds provided by the Contractor while in the storage areas or when placed alongside the trench. (Sawdust filled bags shall not be used).

8.3 HANDLING OF PIPES

- The Tenderer shall state in Schedule II the plant he proposes to use for unloading, bracing and placing the pipes in the trench. All plant shall be subject to the approval of the Engineer. The plant and bracing shall be designed so as not to damage the pipes, the lining and sheeting or disturb existing pipelines.
- Before placing the pipes in the trench the measures taken to ensure the safety of the operations, the material and compaction of the trench floor and the finished line and grade of the pipe bed shall be carefully checked between survey pegs by the Contractor. The Contractor shall check the joint holes for each pipe length and permission to lay obtained from the Engineer's Representative. The pipes shall then be placed in the trench, installed and jointed in accordance with the specification.
- The Contractor shall keep the pipe trench and excavations free from water at all times during the pipe laying operations.

8.3.1 Cleaning of Joints

Cleaning of Joints just prior to the installation of any section of pipe, all foreign matter of every nature and all protective material shall be removed from the surfaces that are to be in contact at joints, so as to leave thoroughly clean surfaces for metal-to-metal contact in the field joints.

8.3.2 Laying Pipe

- Each pipe shall be accurately laid on the prepared bed to the required line and grade. In placing pipe in the trench, the pipe shall be held by an approved sling, at least 0.4m wide, and the pipe shall not be dragged on the bottom of the trench but shall be supported by the sling while being fitted to the adjacent pipe section.
- After each pipe has been set into position it shall be attached to the adjoining pipe by means of an arc-welded joint. The use of dogs, clips, lugs or equivalent devices welded to the pipe for the purpose of forcing it into position will not be permitted.
- The Contractor shall remove any dents, which appear in the wall of the pipe, after the cause or the object causing the dent has been located and removed. The cost of removing the dent and making good the lining, wrapping and backfilling shall be borne by the Contractor.
- Any damage to the pipe during or after laying shall be made good and for this purpose the Inspector may require the pipe or section thereof to be removed from the trench and replaced with pipe which is free from defects.



8.3.3 Completing coatings at joints

- As soon as the field joints have been welded the coating at such field joints shall be completed in accordance with the following procedures:

8.4 SUPPLY OF VALVES

8.4.1 All the valves required for the pipeline will be supplied by the Contractor. The Contractor shall take delivery of these valves and install them in accordance with Drawings.

8.4.2 The valves will be supplied complete with bolts, nuts and washers needed to install them in the pipeline. Rubber insertion or other gaskets approved by the Engineer shall be supplied by the Contractor.

8.4.3 No loose flanges will be supplied with the air valves since each of these items will be installed on flanges of the branches.

8.4.4 Each air valve will be supplied bolted to an isolating valve.

8.4.5 The Contractor shall be liable for any damage caused to the valves or plug cocks while he is loading, transporting or installing these valves or plug cocks.

8.4.6 The Contractor shall notify the Engineer of any such damage immediately it has occurred and the Engineer will arrange for the damage to be repaired or the valve or plug cock to be replaced and the cost of such repairs or replacement will be deducted from the monies due to the Contractor.

8.5 INSTALLATION OF VALVES

8.5.1 Each valve shall be installed in the pipeline in accordance with the drawings as listed in the drawings list.

8.6 SCOUR VALVE AND BY-PASS VALVE

8.6.1 Each valve shall be installed on its flanged branch with the bolts after fitting a 3mm thick rubber insertion or other approved gasket between the flanges.

8.7 GENERAL

8.7.1 Flanges shall be set up and installed in the pipeline with the meeting faces plumb or level according to their position in the pipeline and with the boltholes off centre.

8.7.2 A 3mm rubber insertion gasket or asbestos free clinkerrite gasket shall be supplied and fitted by the Contractor between each pair of joint flanges.

8.7.3 Flange bolts shall be taken up evenly all round in sequence and then shall be set using spanner approved by the Engineer. After 24 hours, the bolts shall be reset to assure that they are tight.

8.8 CLEANING

8.8.1 The interior of the pipes shall be swept clean at the start of each working shift and more frequently if required by the Engineer. Particular care is to be taken to prevent the tramping in of sand grains. No equipment other than pipe jacks, welding conductors, cutting torches



and equipment for making good internal joints shall be taken inside the pipe without the Engineer's permission.

8.8.2 After working hour's ingress to the pipeline shall be prevented by the fitting of approved end plates.

8.9 CHARGING OF PIPELINE

8.9.1 On completion of the pipeline, The Engineer will arrange to fill it with water for testing in accordance with 8.11.

8.9.2 Pipes laid under streams shall be encased in concrete. Thereafter backfilling shall be completed and the stream restored.

8.10 MAINTENANCE

8.10.1 The Contractor shall be responsible for all defects in the pipeline during the construction and maintenance periods and shall immediately make good any defects that arise.

8.11 ACCEPTANCE TEST OF COMPLETED SECTION OF PIPELINE

8.11.1 On completion of the laying of the specific sections of the pipeline and associated structures, the Contractor shall, where necessary, supply temporary pressure testing domes, install and weld the domes on the end of the pipeline, make the necessary preparations, provide the testing equipment and carry out water tightness and structural strength tests of the pipeline system. The length of each section to be individually tested will be defined by the Engineer.

8.11.2 After filling the section to be tested the section shall be allowed to stand for a minimum of 24 hours. The Contractor shall then place the pipeline under a test pressure corresponding to the relevant design head for that section of the pipeline determined by interpolation from the design elevations from the mean seal level as indicated on the general long section and on the hydraulic long section.

8.11.3 Water shall be fed into the system through a calibrated meter and the pressure in the system measured by a calibrated gauge. The Contractor shall provide the necessary pumping system, connection, meter gauges and labour. Each test shall continue for at least three days. Any decrease in pressure shall be made up every hour and the quantity of makeup water measured. The pipeline will not be considered satisfactory until the average leakage is less than 0.01 litres/mm diameter/kilometre/24 hours/30m head.

8.11.4 Any visible leak in the pipeline shall be made good by the Contractor. If any valve leaks it will be made tight by the supplier of the valve.

8.11.5 If the average leakage per 24 hours from each individually tested section of the pipeline is greater than that specified, the Contractor shall take immediate steps to reduce the leakage and shall at his own expense do any excavating necessary to locate the repair leaks or other defects which may develop under test, including removal of backfill already placed, shall make all repairs necessary to secure the necessary water tightness, shall replace such excavated materials, after which the test shall be repeated until the pipe under test is found satisfactory.



ANNEXURE A | SCHEDULE OF QUANTITIES

SCHEDULE OF QUANTITIES KWAMNGANI FARM						
ITEM NO	REF	DESCRIPTION	UNIT	QTY	Rate	Amount
1	SABS 1200	SECTION 1: PRELIMINARY & GENERAL				
	AA	Fixed Charge				
1.1						
1.1.1	8.3.1	Contractual requirements and general (insurance, sureties etc.)	Sum	1		
1.1.2	8.3.2	Facilities required by Contractor	Sum	1		
1.1.3	8.3.3	Complying with Health and Safety Act	Sum	1		
1.1.5		Setting out site as per co-ordinates and developing as build drawings	Prov Sum	1	R 10 000.00	R 10 000.00
1.1.5.1		Mark up % on item 1.1.5	%			
1.1.6		Soil irrigability test	Prov Sum	1	R 10 000.00	R 10 000.00
1.1.6.1		Mark-up on item 1.1.6	%			
1.1.4	8.3.4	Removal of site establishment on completion	Sum	1		
1.2		Time Related Charges				
1.2.1	8.4.1	Contractual requirement	Sum	1		
1.2.2	8.4.2	Facilities for Contractor				
1.2.2.1		a) Offices and storage sheds	Sum	1		
1.2.2.2		d) Living accommodation	Sum	1		
1.2.2.3		e) Ablution and latrine facilities at construction site	Sum	1		
1.2.2.4		g) Water supplies electric power and communication	Sum	1		
1.2.3	8.4.3	Complying with Health and Safety Act	Sum	1		
1.2.4		Site supervision	Sum	1		
TOTAL SECTION 1 CARRIED TO SUMMARY						
SECTION 2: DAYWORK (PROVISIONAL)						
ITEM NO	REF	DESCRIPTION	UNIT	QTY	Rate	Amount
2.1		Section 2.1: Labour				
2.1.1		Skilled	day	1		Rate Only
2.1.2		Semi-skilled	day	1		Rate Only
2.1.3		Unskilled	day	1		Rate Only
2.2		Section 2.2: Plant				
2.2.1		4 x 4 TLB or similar				
		Type.....				
		KW (to be filled in by tenderer)	hour	1		Rate only
2.2.2		Excavator:				
		Type.....				
		KW (to be filled in by tenderer)	hour	1		Rate only
2.2.3		Tipper truck 6m ³ :				
		Type (to be filled in by tenderer)	hour	1		Rate only
TOTAL SECTION 2 CARRIED TO SUMMARY						



SECTION 3: IRRIGATION SYSTEM						
ITEM NO	REF	DESCRIPTION	UNIT	QTY	Rate	Amount
3.1	SABS 1200DB	Excavation				
3.1.1		Excavate in soft & intermediate materials for trench, backfill & compact, incl. site clearance, dispose surplus/unsuitable material, for pipes up to 200mm dia. for depth: Over 0,0m and up to 1,0m	m	750		
3.1.2		Extra-over item B1.1 for excavation in				
3.1.2.1		Hard rock material breakable by hand tools (Provisional)	m ³	1		Rate only
3.1.2.2		Hard rock material requiring blasting (Provisional)	m ³	1		Rate only
3.1.3		Removal of boulders				
3.1.3.1		Removal of boulders in excess of 0,15m ³ volume each (Provisional)	m ³	1		Rate only
3.1.4	8.3.2	Backfilling and compaction to trenches by hand or machine above bedding selected fill blanket to 90% MOD AASHTO density with material available from trench or borrow area within 0.5km free haul distance.	m ³	270		
3.2	SABS 1200LB	Provision of Bedding and Selected Fill				
3.2.1		Available from trench within 1 km				
3.2.1.1		Selected granular material	m ³	10.00		Rate only
3.2.1.2		Selected fill material	m ³	10.00		Rate only
3.3		Thrust Blocks				
3.3.1		Supply and place concrete for thrust blocks, and anchor platform for the trailer	m ³	1.0		
3.4	SABS 1200L	PIPES (for block 1 - 8)				
		Supply, handle, lay in bedding, joint with spigot and socket joints and test to SABS standards. uPVC pipes to SABS 966 part 1 in 6m lengths with integral rubber ring joints. HDPE pipes to SANS4427				
3.4.1		HDPE Pipes				
3.4.1.1		90mm PE100 Class 6 50m	No.	1		
3.4.1.2		75mm PE100 Class 6 100m	No.	1		
3.4.1.3		63mm PE100 Class 6 50m	No.	1		
3.4.1.4		50mm PE100 Class 6, 100m	No.	4		
3.4.1.5		40mm PE100 Class 6, 100m	No.	2		
3.4.1.6		25mm PE100 Class 6, 50m	No.	1		
3.4.2		Dripper lines				
3.4.2.1		Regular compensating integral Dripperline(1l/hr, 0.3m) 500m coil	No.	48		
3.5	SABS 1200L	PIPE FITTINGS AND CONNECTIONS				
3.5.1		Supply, delivery and install all pipe fittings				
3.5.1.1		75mm x 50mm Reducing coupling compr fitting	No.	4		
3.5.1.2		50mm x 40mm Reducing coupling compr fitting	No.	8		
3.5.1.3		75mm x 50mm female elbow compr fitting	No.	4		
3.5.1.4		50mm x 50mm female elbow compr fitting	No.	9		
3.5.2		End caps				
3.5.2.1		40mm compression fitting end cap	No.	6		
3.5.2.2		25mm compression fitting end cap	No.	2		
3.5.3		Reinforced clamp saddle				
3.5.3.1		90mm x 50mm BSP saddle	No.	2		
3.5.3.2		75mm x 50mm BSP saddle	No.	1		
3.5.4		Cluster valves block 1-8				
3.5.4.1		50mm x 1200mm Standpipe galvanised	No.	9		
3.5.4.2		40mm x 1200mm Standpipe galvanised	No.	2		
3.5.4.3		25mm x 1200mm Standpipe galvanised	No.	1		
3.5.4.4		50mm x 90°elbow (f x f) steel galvanised	No.	6		
3.5.4.5		40mm x 90°elbow (f x f) steel galvanised	No.	1		
3.5.4.6		25mm x 90°elbow (f x f) steel galvanised	No.	1		
3.5.4.7		50mm barrel nipple galvanised	No.	12		
3.5.4.8		40mm barrel nipple galvanised	No.	2		
3.5.4.9		25mm barrel nipple galvanised	No.	2		
3.5.4.10		50mm threaded inline Pressure regulating valves Gulf or similar product (valve can be a Nylon valve) (including Pilot Valve)	No.	6		
3.5.4.11		40mm threaded inline Pressure regulating valves Gulf or similar product (valve can be a Nylon valve) (including Pilot Valve)	No.	1		
3.5.4.12		25mm threaded inline Pressure regulating valves Gulf or similar product (valve can be a Nylon valve) (including Pilot Valve)	No.	1		
3.5.4.13		50mm Equal Tee galvanised	No.	2		
3.5.4.14		50mm double purpose air valve similar or similar to ARI Barak	No.	2		
3.5.4.14		25mm double purpose air valve similar or similar to ARI Barak	No.	2		
SUB-TOTAL SECTION 3 CARRIED TO SUMMARY						R 0.00



SECTION 4: PUMP STATION						
ITEM NO	REF	DESCRIPTION	UNIT	QTY	Rate	Amount
4.1	PPS1	Pump Station Civils Supply, delivery and offload pump house construction material. The pumps station to be constructed as per the attached drawings using double layer clay bricks wall. The pumps station to be roofed with concrete slab of min 150mm thickness, constructed using rib and block, lintels and ref 395 mesh with 30Mpa as the topping. The pump house door to be transformer type with louver windows on two side. The pump station to be approximately 15m ²	Sum	1		
4.1.1						
4.2	PPS1	Pump station Mechanical Supply,delivery by road, install and commission a SABS approved Etamom 50-32-125 pump with capacity of Q = 25m ³ /hr, H = 20m . Pump to be directly coupled to the motor using suitable coupler.	No.	1		
4.2.1						
4.3	PPS3	Pump Station Electrical Supply, install and commissioning a SABS approved electric motor to drive the pump mentioned in 4.2.1 above. Electric motor to be rated IP55, high efficiency, 2 pole with power output of 3kW.	No.	1		
4.3.1		Design, test, delivery, erect and commission a motor control centre suitable to control the pump motor in 4.3.1. Rate to include for cabling (30m) - (line from the Eskom transformer to the motor control) and installation of pressure sensors, no flow switches. Rate should also include cable line trench excavation, bedding and backfilling. (Rate to include equipping, the switchgear (overload, lightning, low voltage protection).	No.	1		
4.3.2						
4.3.3		Design, supply, deliver, install and connect the supply cable from Eskom Transformer to the motor control centre.	Sum	1		
		A Distribution board to be installed in the main MCC for small domestic power and shall have an isolator ; 30mA earth leakage, 15A unit for plugs, 2 x 10A circuit breaker for lights and manual override for the daylight sensor to operate the external lighting. Rate to include for the installation of suitable internal and external lighting complete with cabling and switches.	Sum	1		
4.1	PPS3	Pump Station Fittings (Suction and Delivery) Supply, delivery and install the pump station pipe works for the suction and delivery. Steel pipes to be fully galvanized	Sum	1		
4.1.1						
4.1.2		Supply, delivery and install the steel reservoir with a capacity of 100kl, reservoir to be lined with suitable rubber lining, steel roof, inlet 50mm, outlet 100mm, and overflow 50mm.	Sum	1		
SUB-TOTAL SECTION 4 CARRIED TO SUMMARY						

SCHEDULE OF QUANTITIES KWAMNGANI FARM		
ITEM NO	DESCRIPTION	AMOUNT
1	SECTION 1: PRELIMINARY & GENERAL	
2	SECTION 2: DAYWORK (PROVISIONAL)	
3	SECTION 3: IRRIGATION SYSTEM	
4	SECTION 4: PUMP STATION	
	SUB-TOTAL 1	
	ADD 10% TO SUB-TOTAL 1 (ANCILLARIES)	
	SUB-TOTAL 2 (EXCLUDING VAT)	
	ADD 15% TO SUB-TOTAL 2 (VAT)	
	TOTAL (INCLUDING VAT) CARRY TO FORM OF OFFER	



ANNEXURE C | EXPERIENCE

EQUIPMENT & RESOURCES: Please provide an indication of the equipment and resources which will be available to execute the services required:

No	Equipment and resources available in order to execute the services:
1	
2	
3	
4	
5	

Please indicate your experience and expertise by completing the table:

No	Name of project and	Project description	Role (self or sub-contracted)	Project value	Name and contact number of referee
1					
2					
3					
4					
5					

ANNEXURE D | CONTRACTOR'S HEALTH AND SAFETY DECLARATION

Contractors Health and Safety Declaration

In terms of Clause 5(1)(h) of the OHSA 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Department is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2014. To that effect a person duly authorised by the bidder must complete and sign the declaration hereafter in detail.

Declaration by Bidder

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Department's Health and Safety Specifications.
3. I hereby confirm that adequate provision has been made in my tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2014, including the cost of the specific items listed in the tables hereafter.

(Tables to be completed by bidder)

TABLE 1: COST OF SAFETY PERSONNEL

PERSONNEL	COSTS ALLOWED IN BID	AS IN NOMINATED PERSON/S
Construction Supervisor		
Construction Safety Officer		
Health & Safety Representatives		
Health and Safety Committee		

TABLE 2: COST OF SAFETY EQUIPMENT

EQUIPMENT	STATE YES or NO	COST ALLOWED FOR IN BID
Hard hats		
Safety boots		
Safety Clothes		
Add items as per risk assessment:		

TABLE 3: ADDITIONAL OHS COST ITEMS

COST ITEM	COST ALLOWED FOR IN BID
Carrying out and documenting risk assessments of all work to be carried out under the contract.	
Preparation of safe work procedures.	
Preparation of an H&S plan, discussing it with the Department, and then amending it as agreed.	
Preparation of a Project H&S File to include all requirements of Annexure C.	
Regular updating of all of the 4 above items	
Provision of medical certificates of employees	
The completion and checking of the safety file upon completion of the works and handing it over to the Department	

4. I hereby undertake, if my bid is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 7(1)(a) of the Construction Regulations, which plan shall be subject to approval by the Department.
5. I confirm that copies of my company's approved Health and Safety Plan, the Department's Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Department's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
6. I hereby confirm that, I will be liable for any penalties that may be applied by the Department in terms of the said Regulations (Regulation 33) for failure on the Contractor's part to comply with the provisions of the Act and the Regulations.
7. I agree that my failure to complete and execute this declaration to the satisfaction of the Department will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my bid will be prejudiced and may be rejected at the discretion of the Department.

SIGNATURE OF BIDDER:..... **DATE:**.....
(of person authorised to sign on behalf of the Bidder)