



CAPRICORN DISTRICT MUNICIPALITY

BID NUMBER: INF-W09/2024/2025

FOR:

STOCKS REGIONAL WATER SCHEME: PHASE 1: CONTRACT E – 5ML SERVICE RESERVOIR FOR LEDWABA (MMAKOTSE EXTENSION), MMAKOTSE, MOTANTANYANE AND HWERELENG VILLAGES WITHIN THE CAPRICORN DISTRICT MUNICIPALITY

6CEPE/7CE or Higher

TENDER DOCUMENT

THIS DOCUMENT IS COMPILED FOR:

CAPRICORN DISTRICT MUNICIPALITY
P.O BOX 4100
POLOKWANE
0700

Tel: +27 15 294 1000

Fax: +27 15 295 4010

Name of Bidder:			
Bid Amount Contract E (VAT Inclusive):			
Bidder Address:			
CSD Supplier Number:			
Email Address:			
Contact numbers:	Cell:	Tel:	Fax:

Prepared by:

PREPARED BY:
SUPERIOR QUALITY ENGINEERING AND TECHNOLOGIES 8
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POLOKWANE
0700

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Infrastructure
Grant



EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

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TENDER NOTICE AND INVITATION TO TENDER

CAPRICORN DISTRICT MUNICIPALITY

STOCKS REGIONAL WATER SCHEME: WATER SUPPLY

TO BE IMPLEMENTED IN CAPRICORN DISTRICT MUNICIPALITY

CONTRACT No: INF-W09/2024/2025

Capricorn District Municipality invites tenders for the construction of Stocks Regional Water Scheme: Water Supply Phase 1; Contract E at Ledwaba (Mmakotse Extension), Mmakotse, Motantanyane and Hwelereng villages situated adjacent to Lebowakgomo Township, within Capricorn District Municipality which is situated approximately 60km north east of Polokwane along R518 road to Zebediela. (24°18'43.77"S, 29°28'29.23"E)

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

Bid Number	Project Name	CIDB Grading	Min Work Opportunities to be created	Date for Compulsory Clarification Meeting	Bid Closing date
INF-W09/2024/2025	Stocks Regional Water Scheme: Phase 1: Contract F; 5Ml service reservoir for Ledwaba (Mmakotse Extension), Mmakotse, Motantanyane and Hwelereng Villages.	6CEPE/7CE or Higher	52	08 July 2024 Sefako Makgatho Fire Station, Lebowakgomo Zone F (NEXT TO Complex) @10H00 24°18'29.31"S 29°29'14.19"S	06 August 2024 Time: 11H00

Only Tenderers that have a CIDB contractor grading of **6CEPE/7CE** or higher are eligible to submit bids. Joint ventures are also eligible to submit bids provided every member of the Joint Venture is registered with the CIDB and a combined grade of the Joint Venture calculated in accordance with the construction industry development regulations is equal to or higher than a contractor grading of **6CEPE/7CE**.

Tender documents will be available during office hours as from the date of advert from the office of the Capricorn District Municipality, 41 Biccarr Street, and Polokwane. A non-refundable cash tender deposit of **R 1667.00** is payable to secure a copy of the tender document. Queries relating to the issues of these documents may be addressed to Violet Masemola (masemolav@cdm.org.za) at 015 294 1210 or Triphina Kekana(kekanat@cdm.org.za) at 015 294 1212. Technical queries may be directed to Nozuko Siyengo at Technical Services on Tel: 015 294 1167.

Bids will be adjudicated in terms of the preferential procurement Policy Framework Act, 5/2000 in consultation with the CIDB Act. Bids will remain valid for 90 days. Capricorn District Municipality reserves the right to negotiate further conditions and requirements with the successful bidder.

A compulsory clarification meeting will take place on **8th July 2024 starting at 10h00** Prospective Tenderers are requested to meet the engineer at Sefako Makgatho Fire station, Lebowakgomo Zone F.

Complete bid documents fully priced and signed, sealed in an envelope marked "**CONTRACT No INF-W09/2024/2025, STOCKS REGIONAL WATER SCHEME: Phase 1 Contract E**" should be deposited in the Tender Box located in the foyer at the Capricorn District Municipality offices at 41 Biccarr Street, Polokwane not later than **11:00 on 06 August 2024**. Tenders will be opened in public immediately after the closing time referred to above. Telegraphic, e-mail or Tele-fax transmission and late tenders will not be accepted for consideration and where feasible shall be returned to the sender.

The Tenderer should have a staff member who has completed, the NQF level 5-unit standard "Develop and Promote Labour Intensive Construction Strategies".

Public bodies must only award contracts to contractors who have demonstrated that they will have in their employ (if awarded the contract) suitably qualified senior and middle supervisory staff to supervise the labour-intensive works during the validity of the contract.

Ramakuntwane Selepe
Municipal Manager

CAPRICORN DISTRICT MUNICIPALITY
41 Biccarr Street, Polokwane

INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF CAPRICORN DISTRICT MUNICIPALITY

BID NUMBER: INF-W09/2024/2025 **CLOSING DATE:** 06 AUGUST 2024 **CLOSING TIME:** 11:00

DESCRIPTION: *STOCKS REGIONAL WATER SCHEME PHASE 1: CONTRACT E; 5ML SERVICE RESERVOIR FOR LEDWABA (MMAKOTSE EXTENSION), MMAKOTSE, MOTANTANYANE AND HWELERENG VILLAGES*

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

BID DOCUMENTS MAY BE POSTED TO:

CAPRICORN DISTRICT MUNICIPALITY
PO BOX 4100
POLOKWANE
0700

OR

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

41 BICCARD STREET
POLOKWANE
0699

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

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

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

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

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

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

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER CODE.....NUMBER.....

CELLPHONE NUMBER

FACSIMILE NUMBER CODE NUMBER.....

E-MAIL ADDRESS

VAT REGISTRATION NUMBER.....

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

HAS A PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 BEEN SUBMITTED? (MBD 6.1)YES/NO

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

- AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA)
 - A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM (SANAS)
 - A REGISTERED AUDITOR
- (Tick applicable box)

(A PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022 MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR PREFERENTIAL PROCUREMENT)

ARE YOU THE ACCREDITED REPRESENTATIVE
IN SOUTH AFRICA FOR THE GOODS/SERVICES/WORKS OFFERED? YES/NO
(IF YES ENCLOSE PROOF)

SIGNATURE OF BIDDER

DATE

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

TOTAL BID PRICE..... TOTAL NUMBER OF ITEMS OFFERED.....

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

Municipality / Municipal Entity: Capricorn District Municipality.

Department: Supply Chain

Contact Person: Ms Violet Masemola or Ms Triphina Kekana

Tel: 015 294 1210 or 015 294 1212

Fax: 015 291 5697

ANY ENQUIRIES REGARDING TECHNICAL INFORMATION MAY BE DIRECTED TO:

Contact Person: Nozuko Siyengo: Technical Services

Tel: 015 294 1167

Fax: 015 291 5697



CAPRICORN DISTRICT MUNICIPALITY

T1.2 Bid Data

The conditions of Bid are the Standard Conditions of Bid as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of Bidders as an Annex to this Bid Data.

The Standard Conditions of Bid make several references to the Bid Data for details that apply specifically to this Bid. The Bid Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of Bid. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Bid to which it mainly applies.

The additional conditions of Bid are:

Clause number	Bid Data
F.1.1	The employer is: Name: Capricorn District Municipality Address: PO BOX 4100, 41 Biccard Street, Polokwane Telephone: (015) 294 1000 Fax: (015) 291 5697
F.1.2	The Bid documents issued by the employer comprise: T1.1 Bid notice and invitation to Bid T1.2 Bid data T2.1 List of returnable documents T2.2 Returnable schedules Part 1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Form of Guarantee C1.4 Occupational Health and Safety Part 2: Special Conditions of Contract C2.1 Special Conditions of Contract Part 3: Scope of work C3.1 Scope of work C3.2 Drawing Descriptions C3.3 Procurement C3.4 Construction C3.5 Management Part 4: Project Specification Part 5: Drawings Part 6: Site information Part 7: Schedule of Quantities C7.1 Preamble to Schedule of Quantities C7.2 Schedule of Quantities
F.1.4	The employer's agent is: SUPERIOR QUALITY ENGINEERING AND TECHNOLOGIES 8 60 MAGAZYN STREET POLOKWANE, 0700 Telephone: (015) 291 1366 Facsimile: 0865464110
F.2.1	Only those tenderers who can demonstrate that they will have in their employ management and supervisory staff satisfying the requirements of the scope of work for labour-intensive competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders. The tenderers must submit to the Employer, names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy eligibility requirements.

F.2.1	<p>Only those Bidders who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum Bided for a 6CEPE/7CE or higher class of construction work, are eligible to submit Bids.</p> <p>Joint ventures are eligible to submit Bids provided that:</p> <ol style="list-style-type: none"> 1. every member of the joint venture is registered with the CIDB; 2. the lead partner has a contractor grading designation in the 6CEPE/7CE or higher class of construction work; and 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum Bided for a 6CEPE/7CE or higher class of construction work.
F.2.1	<p>The following Bidders who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to submit Bids:</p> <ol style="list-style-type: none"> a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum Bided for a 6CEPE/7CE class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria: <ol style="list-style-type: none"> i) The Department, following an interview with the management of the enterprise, is satisfied that the enterprise has the potential to develop and qualify to be registered in a higher contractor grading designation; and ii) The Department, following a risk assessment, is able to provide the necessary supportive measures required to enable the enterprise to successfully execute the contract. <p>Joint ventures are eligible to submit Bids provided that:</p> <ol style="list-style-type: none"> 1. Every member of the joint venture is registered with the CIDB; 2. The lead partner has a contractor grading designation in the 6CEPE/7CE or higher class of construction work; and 3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum Bided for a 6CEPE/7CE or higher class of construction work.
F.2.7	<p>The arrangements for a compulsory clarification meeting are as stated in the Bid Notice and Invitation to Bid.</p> <p>Bidders must sign the attendance list in the name of the Biding entity. Addenda will be issued to and Bids will be received only from those Biding entities appearing on the attendance list.</p>
F.2.12	<p>No alternative Bid offers will be considered</p> <p>If a Bidder wishes to submit an alternative Bid offer, the only criteria permitted for such alternative Bid offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.</p> <p>Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative Bid offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative Bid offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the Bidder, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount Bided for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.</p>
F.2.13.3	<p>Parts of each Bid offer communicated on paper shall be submitted as original, plus 2 copies.</p>

F.2.13.5 F2.15.1	<p>The employer's address for delivery of Bid offers and identification details to be shown on each Bid offer package are:</p> <p>Location of Bid box: Tender Box Physical address: 41 Biccard Street, Polokwane, 0700 Identification details: Contract No. INF-W09/2024/2025: Stocks Regional Water Scheme Phase 1: Contract E; 5MI service reservoir for Ledwaba (Mmakotse Extension), Mmakotse, Motantanyane and Hwelereng Villages Postal address: Box 4100, Polokwane,0700</p>
F.2.13 F.3.5	A two-envelope procedure will not be followed.
F.2.15	The closing time for submission of Bid offers is as stated in the Bid Notice and Invitation to Bid.
F.2.15	Telephonic, telegraphic, telex, facsimile or e-mailed Bid offers will not be accepted.
F.2.16	The Bid offer validity period is 90 days
F.2.18	The tenderer must submit to the Employer, names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements
F.2.19	Access shall be provided for inspections, tests and analysis.
F.2.23	<p>The Bidder is required to submit with his Bid a Certificate of Contractor Registration issued by the Construction Industry Development Board and a copy of an original valid Tax Clearance Certificate issued by the South African Revenue Services.</p> <p>Where a Bidder satisfies CIDB contractor grading designation requirements through joint venture formation, such Bidders must submit the Certificates of Contractor Registration in respect of each partner.</p>
F.3.4	Bids will be opened immediately after the closing time for Bids at Municipal Offices, at 41 Biccard Street, Polokwane.
	<p>The procedure for the evaluation of responsive Bids is Method 2</p> <p>The financial offer will be scored using Formula 2 (option 1) where the value of W_1 is:</p> <ol style="list-style-type: none"> 1) 90 where the financial value inclusive of VAT of all responsive. Bids received have a value in excess of R 50 000 000.00; or 2) 80 where the financial value inclusive of VAT of one or more responsive Bid offers equals or is less than R 50 000 000.00. <p>Up to 100 minus W_1 Bid evaluation points will be awarded to Bidders who complete the preference schedule and who are found to be eligible for the preference claimed.</p>
F.3.11	<p>A maximum of 100 minus W_1 Bid evaluation points will be awarded for the extent to which the Bided Contract Participation Goal exceeds the specified minimum. The basis of award of preference points is:</p> $N_p = \frac{(100 - W_1) \times (D - D_s)}{(X - D_s)}$ <p>where D = Bided Contract Participation Goal. D_s = the minimum Contract Participation Goal below which no preference will be granted, namely,% X = the maximum Contract Participation Goal above which no further Bid evaluation points are awarded, namely %.</p>
F3.13.1	Bid offers will only be accepted if:

	<ul style="list-style-type: none"> a) the Bidder has in his or her possession an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations; b) the Bidder is registered with the Construction Industry Development Board in an appropriate contractor grading designation; c) the Bidder or any of its directors is not listed on the Register of Bid Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; d) the Bidder has not: <ul style="list-style-type: none"> i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; and e) Bidder has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Bidder's ability to perform the contract in the best interests of the employer or potentially compromise the Bid process. f) the Bidder does not have arrears on municipal rates and levies exceeding 3 months.
F.3.18	The number of paper copies of the signed contract to be provided by the employer is one.

Standard Conditions of Bid

F.1 General

F.1.1 Actions

The employer and each Bidder submitting a Bid offer shall comply with these conditions of Bid. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently.

F.1.2 Bid Documents

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

F.1.3 Interpretation

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

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

F.1.3.3 For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

- a) **comparative offer** means the Bidder's financial offer after the factors of non-firm prices, all unconditional discounts and any other Bided parameters that will affect the value of the financial offer have been taken into consideration
- b) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the Bid process; and
- c) **fraudulent practice** means the misrepresentation of the facts in order to influence the Bid process or the award of a contract arising from a Bid offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- d) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

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

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

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

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

F.2 Bidder's obligations

F.2.1 Eligibility

Submit a Bid offer only if the Bidder complies with the criteria stated in the Bid data and the Bidder, or any of his principals, is not under any restriction to do business with employer.

F.2.2 Cost of Biding

Accept that the employer will not compensate the Bidder for any costs incurred in the preparation and submission of a Bid offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

F.2.3 Check documents

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

F.2.4 Confidentiality and copyright of documents

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

F.2.5 Reference documents

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

F.2.6 Acknowledge addenda

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

F.2.7 Clarification meeting

Attend **compulsory a clarification meeting** at which Bidders may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the Bid data.

F.2.8 Seek clarification

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

F.2.9 Insurance

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

F.2.10 Pricing the Bid offer

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

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

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

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

F.2.11 Alterations to documents

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

F.2.12 Alternative Bid offers

F.2.12.1 Submit alternative Bid offers only if a main Bid offer, strictly in accordance with all the requirements of the Bid documents, is also submitted. The alternative Bid offer is to be submitted with the main Bid offer together with a schedule that compares the requirements of the Bid documents with the alternative requirements the Bidder proposes.

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

F.2.13 Submitting a Bid offer

F.2.13.1 Submit a Bid offer to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the Bid data.

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

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

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

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

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

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

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

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

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

F.2.15 Closing time

F.2.15.1 Ensure that the employer receives the Bid offer at the address specified in the Bid data not later than as stated in the Bid data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept Bid offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the Bid data.

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

F.2.16 Bid offer validity

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

F.2.16.2 If requested by the employer, consider extending the validity period stated in the Bid data for an agreed additional period.

F.2.17 Clarification of Bid offer after submission

Provide clarification of a Bid offer in response to a request to do so from the employer during the evaluation of Bid offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the total of the prices or substance of the Bid offer is sought, offered, or permitted. **The total of the prices stated by the Bidder shall be binding upon the Bidder.**

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

F.2.18 Provide other material

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

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

F.2.19 Inspections, tests and analysis

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

F.2.20 Submit securities, bonds, policies, etc

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

F.2.21 Check final draft

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

F.2.22 Return of other Bid documents

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

F.2.23 Certificates

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

F.3 The employer's undertakings

F.3.1 Respond to clarification

Respond to a request for clarification received up to five working days prior to the Bid closing time stated in the Bid Data and notify all Bidders who drew procurement documents.

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the Bid documents to each Bidder during the period from the date of the Bid Notice until seven days before the Bid closing time stated in the Bid Data. If, as a result a Bidder applies for an extension to the closing time stated in the Bid Data, the Employer may grant such extension and, will then notify it to all Bidders who drew documents.

F.3.3 Return late Bid offers

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

F.3.4 Opening of Bid submissions

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

F.3.4.2 Announce at the opening held immediately after the opening of Bid submissions, at a venue indicated in the Bid data, the name of each Bidder whose Bid offer is opened, the total of his prices, preferences claimed and time for completion, if any, for the main Bid offer only.

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

F.3.5 Two-envelope system

A two-envelope procedure will not be followed in this contract.

F.3.6 non-disclosure

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

F.3.7 Grounds for rejection and disqualification

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

F.3.8 Test for responsiveness

Determine, on opening and before detailed evaluation, whether each Bid offer properly received:

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

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

- detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- change the Employer's or the Bidder's risks and responsibilities under the contract, or
- affect the competitive position of other Bidders presenting responsive Bids, if it were to be rectified.

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

F.3.9 Arithmetical errors

Check responsive Bid offers for arithmetical errors, correcting them in the following manner:

- Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- If a bill of quantities (or schedule of rates) apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line-item total as quoted shall govern, and the unit rate will be corrected.
- Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the Bidder's addition of prices, the total of the prices shall govern and the Bidder will be asked to revise selected item prices (and their rates if a bill of quantities applies) to achieve the Bided total of the prices.

Consider the rejection of a Bid offer if the Bidder does not correct or accept the correction of his arithmetical errors in the manner described above.

F.3.10 Clarification of a Bid offer

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

F.3.11 Evaluation of Bid offers

F3.11.1 General

Step 1

Bidders will firstly be evaluated on their responsiveness.

This includes the following

1. Tax Pin Access Code (If JV, For Both)
2. Cipro Document Attached (If JV, For Both)
3. Certified ID Copies of All Directors/Members/Shareholders of The Company/Business (If JV, For Both)
4. Proof of company registration on central supplier database registration (CSD)
5. Proof of residence municipal rates and taxes or letter from tribal authority or valid lease agreement must be attached.
6. Attended Compulsory Site meeting
7. Authority of Signatory (in a company letter head)
8. Signing of Form of Offer
9. Document filled in using a black pen
10. Alterations signed
11. CIDB grading
12. JV Agreement in Case Of JV
13. All pages signed
14. All MBD forms in tender document must be completed and signed in full – If not, tender will be rejected.
15. A detailed list of returnable documents as indicated on section T2.1 of this document.

Step 2

According to the MFMA Circular No. 53 of the Municipal Finance Act No. 56 of 2003. Bidders will firstly be evaluated on Functionality. The minimum Score for functionality is 70%.

Only the qualifying Tenderers will be evaluated on Method 2.

The following is the criteria that the Bidders will be evaluated for Functionality:

FUNCTIONALITY COMPETENCE ACHIEVEMENT SCHEDULES

TABLE A1: COMPANY EXPERIENCE (EXPERIENCE IN SIMILAR PROJECTS)

	TARGETED GOALS Name reference with contact details	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	More than 4 projects	20		
2	3 projects	15		
3	2 projects	10		
4	1 project	5		
	MAXIMUM POINTS	20		

N.B: TENDERERS TO SUBMIT NAMES COMPLETE WITH VALID CONTACT DETAILS. ATTACH APPOINTMENT LETTERS AND COMPLETION CERTIFICATES FOR THE LISTED PROJECTS. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

TABLE A2: FINANCIAL REFERENCES

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Tenderer submitted banking details proof attached	5		
2	Bank rating of "C" or better	5		
3	Letter of intent from a registered financial institution as a guarantor in the amount of 10% as specified for surety purposes shall be submitted.	10		
	MAXIMUM POINTS	20		

N.B: TENDERERS TO SUBMIT PROOF. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

TABLE A3: KEY PERSONEL EXPERIENCE & SPECIFIC KNOWLEDGE

	TARGETED GOALS	TENDERED GOAL	POINTS Claimed by tenderer	ALLOCATED POINTS
1	Contracts Manager 5 years labour intensive construction experience	10		
2	Site agent 5 years' experience in water projects	15		
3	Cleek of Site trained in labour intensive construction methods at least NQF 2	5		
4	Foreman has NQF Level 5 Unit Standard "Develop & Promote Labour Intensive Construction Strategies".	10		
	MAXIMUM POINTS	40		

N.B.: TENDERERS TO SUBMIT CURRICULUM VITAE & CERTIFICATES OF SITE AGENT AND COMPANY PROFILE. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

TABLE A4: PLANT AND EQUIPMENT

	TARGETED GOALS	TENDERED GOAL	POINTS Claimed by tenderer	ALLOCATED POINTS
1	1 TLB	5		
2	1 20-ton Excavator	5		
3	2 Tipper trucks OR 1 Tipper and 1 Flatbed	5		
4	1 Water truck (10000lt)	5		
	MAXIMUM POINTS	20		

N.B: TENDERERS TO SUBMIT VEHICLE/EQUIPMENT OWNERSHIP PROOF OR INTENTION TO HIRE WITH PROOF OF THE OWNER'S DOCUMENTS. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

THE MINIMUM SCORE FOR FUNCTIONALITY IS 70

Step 3

Price and Specific goals Claimed Contribution. Reduce each responsive Bid offer to a comparative offer and evaluate it using the Bid evaluation method that is indicated in the Bid Data and described below:

Method 2: Financial offer, and preferences	1) Score Bid evaluation points for financial offer.
	2) Confirm that Bidders are eligible for the preferences claimed, and if so, score Bid evaluation points for preferencing.
	3) Calculate total Bid evaluation points.
	4) Rank Bid offers from the highest number of Bid evaluation points to the lowest.
	5) Recommend Bidders with the highest number of Bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest 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) 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.

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 and proof (identity document and/or medical report) should be submitted). Failure to submit proof will result in loss of specific goals points.

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)	Percentage of ownership on specific goal (To be completed by the tenderer)	Number of points claimed. (80/20 system) (To be completed by the tenderer)	Verification of points claimed) (To be completed by the organ of state)
Owned by black South African people (Male or female)	5			

Owned by people who are women (of all races)	5			
Owned by black South African people who are youth	5			
Owned by people with disabilities	5			
Total points claimed	20			

Table 2: Business entity ownership disclosure
Bidders must list all shareholders and provide ownership information in terms of the business entity registration certificate

Full Name	Identity Number	% Owned	South African (Yes/No)	Gender	Race	Youth (Yes/No)	Disable (Yes/No)

F.3.11.2 Scoring Financial Offers

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

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

N_{FO} = the number of Bid evaluation points awarded for the financial offer.

W_1 = the maximum possible number of Bid evaluation points awarded for the financial offer as stated in the Bid Data.

A = a number calculated using either formulas 1 or 2 below as stated in the Bid Data.

Formula	Basis for comparison	Option 1	Option 2
1	Highest price or discount	$(1 + \frac{(P - P_m)}{P_m})$	P/P_m
2	Lowest price or percentage commission/fee	$(1 - \frac{(P - P_m)}{P_m})$	P_m/P

where:

P_m = the comparative offers of the most favourable Bid offer.

P = the comparative offers of Bid offer under consideration.

F.3.11.3 Scoring quality (functionality)

Score quality in each of the categories stated in the Bid Data and calculate total score for quality.

F.3.12 Insurance provided by the employer

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

F.3.13 Acceptance of Bid offer

F.3.13.1 Accept Bid offer only if the Bidder satisfies the legal requirements stated in the Bid Data.

F.3.13.2 Notify the successful Bidder of the employer's acceptance of his Bid offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the Bid data, or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful Bidder as described in the form of offer and acceptance.

F.3.14 Notice to unsuccessful Bidders

After the successful Bidder has acknowledged the employer's notice of acceptance, notify other Bidders that their Bid offers have not been accepted.

F.3.15. Prepare contract documents

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

- a) addenda issued during the Bid period,
- b) inclusion of some of the returnable documents,
- c) other revisions agreed between the employer and the successful Bidder, and
- d) the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Issue final contract

Prepare and issue the final draft of contract documents to the successful Bidder for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of Bid require the Bidder to submit, after acceptance by the employer, shall be included.

F.3.17 Complete adjudicator's contract

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

F.3.18 Provide copies of the contracts

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



CAPRICORN DISTRICT MUNICIPALITY

T2.1 List of Returnable Documents

The Bidder must complete the following returnable documents:

1 Returnable Schedules required only for Bid evaluation purposes

- Record of Addenda to Bid Documents
- Certificate of authority for joint ventures (where applicable)
- Schedule of Subcontractors
- Schedule of Plant and Equipment
- Schedule of the Bidder's Experience
- Proposed Amendments and Qualifications
- Municipal statement on Bidder's rates and taxes
- Schedule of personnel & employees
- Preliminary programme
- Signatory of authority (Power of attorney)
- Site inspection certificate
- CIDB Certificate

2 Other documents required only for Bid evaluation purposes

- Certificate of Contractor Registration issued by the Construction Industry Development Board
- MBD 2: An original valid Tax Clearance Certificate issued by the South African Revenue Services.

3 Returnable Schedules that will be incorporated into the contract

- MBD 3.1: Pricing schedule – Firm prices (Purchases)
- MBD 3.2: Pricing schedule – non-Firm prices (Purchases)
- MBD 6.1: Preference Points Claim Form in Terms of The Preferential Procurement Regulations 2001
- MBD 7.2: Contract form - rendering of services
- MBD 4 : Declaration of interest
- MBD 8 : Declaration of bidder's past supply chain management practices
- MBD 9 : Certificate of independent bid determination

4 Other documents that will be incorporated into the contract

5 The offer portion of the C1.1 Offer and Acceptance

6 C1.2 Contract Data (Part 2)

7 C6.2 Bills of quantities

Record of Addenda to Bid documents

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

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Attach additional pages if more space is required.

Signed		Date	
Name		Position	
Bidder			

Certificate of Authority for Joint Ventures (Where applicable)

This Returnable Schedule is to be completed by joint ventures.

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

NAME OF FIRM	ADDRESS	DULY SIGNATORY (Signature, designation) AUTHORIZED name &
Lead partner		

Schedule of Proposed Subcontractors

We notify you that it is our intention to employ the following Subcontractors for work in this contract. If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor.
1.			
2.			
3.			
4.			
5.			
Signed		Date	
Name		Position	
Bidder			

Schedule of Plant and Equipment

The following are lists of major items of relevant equipment that I/we presently own or lease and will have available for this contract or will acquire or hire for this contract if my/our Bid is accepted.

(a) Details of major equipment that is owned by and immediately available for this contract.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

(b) Details of major equipment that will be hired, or acquired for this contract if my/our Bid is acceptable.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed		Date	
Name		Position	
Bidder			

Schedule of the Bidder's Experience

The following is a statement of similar work successfully executed by myself/ourselves:

Employer, contact person and telephone number.	Description of contract	Value of work inclusive of VAT (Rand)	Date completed

--	--	--	--

Signed		Date	
Name		Position	
Bidder			

Proposed amendments and qualifications

The Bidder should record any deviations or qualifications he may wish to make to the Bid documents in this Returnable Schedule. Alternatively, a Bidder may state such deviations and qualifications in a covering letter to his Bid and reference such letter in this schedule.

The Bidder's attention is drawn to clause F.3.8 of the Standard Conditions of Bid referenced in the Bid Data regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

Signed		Date	
Name		Position	
Bidder			

Schedule of Personnel and Employees

The Tenderer shall state below the number of Personnel and Employees to be employed on the Works.

PERSONNEL AND EMPLOYEES	TENDER		TENDER	
	FULL TIME	PART TIME	FULL TIME	PART TIME
1. Technical staff				
2. Clerical staff				
3. Artisans				
4. Semi-skilled				
5. Unskilled labour				
Total				

State the name, qualifications and experience of permanent Site agent:

Date:

SIGNATURE OF TENDERER:

Signatories Authority (Power of Attorney)

1. INFORMATION TO BE PROVIDED

1.1 If the Tenderer is a COMPANY

- (a) Affix a certificate copy of the Certificate of Incorporation to this page.
- (b) Affix a copy of the relevant resolution of the Board of Directors, duly signed and dated
- (c) List the Directors

.....
.....

1.2 If the Tenderer is a CLOSE CORPORATION

- (a) Affix a certificate copy of the Founding Statement to this page
- (b) Affix a copy of the relevant resolution of the Members, duly signed and dated
- (c) List the Members

.....
.....

1.3 If the Tenderer is a PARTNERSHIP

- (a) Affix a copy of the relevant resolution on the Partners, duly signed and dated
- (b) List the Partners

.....
.....

1.2 If the Tenderer is a ONE-MAN-CONCERN.

Provided the full name, identity number and qualifications of the person

.....

1.3 If the Tenderer is a JOINT VENTURE

- a) Affix a copy of the original document of information defining the conditions under which the joint venture will function, its period of duration and the participating persons, companies and/or firms
- b) Affix a certificate signed for or on behalf of each participating person, company and/or firm authorizing the person who signed the tender to do so.

1.4 If the Tenderer is a CONCERN OTHER than these listed above

Provide full details of the CONCERN submitting the tender:

.....

Site Inspection Certificate

This is to certify that I,

.....

representing and duly authorized by (Tenderer)

.....

attended the site inspection on

.....

Having prior to this site visit carefully examined the tender document, technical information and drawings supplied, I confirm that I was given unrestricted access to inspect those sections of the Site necessary for the execution of the Works.

I further confirm that I am completely satisfied with the scope of work as explained by the Engineer, and am fully aware of all Site conditions and regulations of whatsoever nature that could influence the preparation of our tender.

I therefore append my signature below in agreement that we will not institute any claim against the Employer after submission of our tender based on lack of knowledge of site conditions or regulations appertaining to the execution of this Contract.

Signature of Tenderer's Representative

Date

Signature of Engineer's Representative

Date

**COMPLIANCE WITH OCCUPATIONAL
CONSTRUCTION REGULATIONS, 2003**

HEALTH AND SAFETY ACT, 1993 AND

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

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

SIGNED ON BEHALF OF THE TENDERER:

Note to tenderer:

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

The tenderer is to affix to this page either:

- Written proof of his registration with the CIDB as a Category **6CEPE/7CE**

Or

- Written proof of his application to the CIDB for registration as a contractor in the category listed above.

Note:

1. Failure to affix such documentation as prescribed to this page shall result in this tender not being further considered for the award of the contract.
2. Should this tender be considered for award of the contract, based on proof of submission of application for registration in the appropriate category with the CIDB, and should proof of such subsequent registration not be forthcoming to the employer by the time of award of the contract, then this tender will no longer be considered for the award of the contract.

MBD 3.1

**PRICING SCHEDULE - FIRM PRICES
(PURCHASES)**

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

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

Name of Bidder.....	Bid Number.....
Closing Time	Closing Date

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

ITEM NO.	QUANTITY	DESCRIPTION **(ALL APPLICABLE TAXES INCLUDED)	BID PRICE IN RSA CURRENCY
-	Required by:	.....
-	At:	.....
-	Brand and Model	.....
-	Country of Origin	.....
-	Does the offer comply with the specification(s)?		*YES/NO
-	If not to specification, indicate deviation(s)	.....
-	Period required for delivery	.....	*Delivery: Firm/Not firm
-	Delivery basis	.....

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

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

*Delete if not applicable

**PRICING SCHEDULE – NON-FIRM PRICES
(PURCHASES)**

NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED IN THE BIDDING DOCUMENTS.

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

Name of Bidder.....	Bid number.....
Closing Time	Closing Date

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

ITEM NO.	QUANTITY	DESCRIPTION **(ALL APPLICABLE TAXES INCLUDED)	BID PRICE IN RSA CURRENCY
----------	----------	--------------------------------------------------	---------------------------

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

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

*Delete if not applicable

MBD 3.2

PRICE ADJUSTMENTS

A NON-FIRM PRICES SUBJECT TO ESCALATION

1. IN CASES OF PERIOD CONTRACTS, NON-FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON-FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES
2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = (1 - V)Pt \left(D1 \frac{R1t}{R1o} + D2 \frac{R2t}{R2o} + D3 \frac{R3t}{R3o} + D4 \frac{R4t}{R4o} \right) + VPt$$

Where:

- Pa = The new escalated price to be calculated.
- (1-V) Pt = 85% of the original bid price. **Note that Pt must always be the original bid price and not an escalated price.**
- D1, D2.. = Each factor of the bid price eg. labour, transport, clothing, footwear, etc. The total of the various factors D1,D2...etc. must add up to 100%.
- R1t, R2t..... = Index figure obtained from new index (depends on the number of factors used).
- R1o, R2o = Index figure at time of bidding.
- VPt = 15% of the original bid price. This portion of the bid price remains firm i.e. it is not subject to any price escalations.

3. The following index/indices must be used to calculate your bid price:

Index..... Dated..... Index..... Dated..... Index..... Dated.....
 Index..... Dated..... Index..... Dated..... Index..... Dated.....

4. FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA. THE TOTAL OF THE VARIOUS FACTORS MUST ADD UP TO 100%.

FACTOR (D1, D2 etc. eg. Labour, transport etc.)	PERCENTAGE OF BID PRICE

B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS

1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		

2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE

DECLARATION OF INTEREST

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

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

3.1 Full Name:

3.2 Identity Number:

3.3 Company Registration Number:

3.4 Tax Reference Number:

3.5 VAT Registration Number:

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

3.6.1 If so, furnish particulars.

.....
.....

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

3.7.1 If so, furnish particulars.

.....
.....

* MSCM Regulations: "in the service of the state" means to be –

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

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

3.8.1 If so, furnish particulars.

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

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

3.8 Are you, aware of any relationship (family, friend, other) between a bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?

YES / NO

3.9.1 If so, furnish particulars

.....
.....

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

3.10.1 If so, furnish particulars.

.....
.....

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

3.11.1 If so, furnish particulars.

.....
.....

CERTIFICATION

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

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

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

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

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

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

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

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

***YES / NO**

.....
.....

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

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

2.2 If yes, provide particulars.

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

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

* Delete if not applicable

***YES / NO**

3.1 If yes, furnish particulars

.....
.....

***YES / NO**

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

***YES / NO**

4.1 If yes, furnish particulars

.....
.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

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

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

- 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.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations,

competitive tendering process or any other method envisaged in legislation;

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

4.3. POINTS AWARDED FOR PRICE

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

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

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \\
 \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{P min}}{\mathbf{P min}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{P min}}{\mathbf{P min}} \right)
 \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

4.4.1. POINTS AWARDED FOR PRICE

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

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \\
 \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{P max}}{\mathbf{P max}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{P max}}{\mathbf{P max}} \right)
 \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

5. POINTS AWARDED FOR SPECIFIC GOALS

- 5.1. 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:
- 5.2. 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 -
- (b) 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
 - (c) 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)
Owned by black South African people (Male or Female)	5	
Owned by people who are women (of all races)	5	
Owned by black South African people who are youth	5	
Owned by people with disability	5	
Total points	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

5.3. Name of
company/firm.....

5.4. Company registration number:
.....

5.5. 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]

5.6. 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:

.....

.....

.....

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 fulfilment 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 numberdated.....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.

<i>DESCRIPTION OF SERVICE</i>	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

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

SIGNED AT ON

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

WITNESSES

1

2

DATE:

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

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

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

CERTIFICATION

**I, THE UNDERSIGNED (FULL NAME)
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION
FORM TRUE AND CORRECT.**

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. takes all reasonable steps to prevent such abuse;
 - b. rejects the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancels a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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

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

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of:

_____ that:

(Name of Bidder)

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

MBD 9

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

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder



CAPRICORN DISTRICT MUNICIPALITY

C1.1 Form of Offer and Acceptance

Offer

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

CONTRACT NO. INF-W09/2024/2025

STOCKS REGIONAL WATER SCHEME PHASE 1: CONTRACT E; 5ML SERVICE RESERVOIR FOR LEDWABA (MMAKOTSE EXTENSION), MMAKOTSE, MOTANTANYANE AND HWELERENG VILLAGES

The Bidder, identified in the offer signature block, has examined the documents listed in the Bid data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of Bid.

By the representative of the Bidder, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Bidder offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

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

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

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Bidder before the end of the period of validity stated in the Bid data, whereupon the Bidder becomes the party named as the contractor in the conditions of contract identified in the contract data.

Signature Date

Name
Capacity

for the Bidder
(Name and address of organization)

.....

Name and signature of witness

Acceptance

By signing this part of this form of offer and acceptance, the employer identified below accepts the Bidder's offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the Bidder's offer shall form an agreement between the employer and the Bidder upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1: Agreements and contract data, (which includes this agreement)
- Part C2: Pricing data
- Part C3: Scope of work
- Part C4: Site information

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

Deviations from and amendments to the documents listed in the Bid data and any addenda thereto as listed in the Bid schedules as well as any changes to the terms of the offer agreed by the Bidder and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

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

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

Signature Date

Name

Capacity

**for the
Employer** CAPRICORN DISTRICT MUNICIPALITY
Box 4100
41 Biccard Streets
Polokwane
0700

Name and signature of witness Date

.....

Schedule of Deviations

1 Subject

 Details

2 Subject

 Details

3 Subject

 Details

4 Subject

 Details

5 Subject

 Details

By the duly authorised representatives signing this agreement, the employer and the Bidder agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Bid data and addenda thereto as listed in the Bid schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Bidder and the employer during this process of offer and acceptance.

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



CAPRICORN DISTRICT MUNICIPALITY

C1.2 Contract Data

The General Conditions of Contract for Construction Works (2015) published by the South African Institution of Civil Engineering, are applicable to this contract and forms Volume 1 of the Contract Document. Volume 2 is the Contract Drawings Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (Tel: 011-805 5947).

The General Conditions of Contract for Construction Works make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

Each item of data given below is cross-referenced to the clause in the General Conditions of Contract for Construction Works to which it mainly applies.

<p>4.5.2</p> <p>49.6.1 to 4.9.6.3</p> <p>55.1.8</p>	<p>The variations to the General Conditions of Contract are:</p> <p>Replace the term “Safety” with “Occupational Health and Safety”</p> <p>Replace the term “Bank” with “Bank or Insurance Company”</p> <p>Replace sub-clause with: The Contractor or anyone on his behalf or in his employ would pay, offer or offer as payment to any person in the employ of the Employer, or in the employ of the Engineer, a gratuity or reward or commission.</p>
	<p>The additional clauses to the General Conditions of Contract are:</p> <p>Payment for the labour-intensive component of the works</p> <p>Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.</p> <p>Linkage of payment for labour-intensive component of works to submission of project data</p> <p>The Contractor’s payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor’s invoices shall not be paid until all pending labour information has been submitted.</p> <p>Applicable labour laws</p> <p>The current Ministerial Determination (also downloadable at www.epwp.gov.za), Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled or semi-skilled workers.</p> <p>1. Introduction</p>

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on an Expanded Public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

1.2 In this document

- (a) "department" means any department of the State, implementing agent or contractor;
- (b) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on an EPWP;
- (c) "worker" means any person working in an elementary occupation on an EPWP;
- (d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;
- (e) "management" means any person employed by a department or implementing agency to administer or execute an EPWP;
- (f) "task" means a fixed quantity of work;
- (g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
- (h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
- (i) "time-rated worker" means a worker paid on the basis of the length of time worked.

2. Terms of Work

2.1 Workers on an EPWP are employed on a temporary basis or contract basis.

3. Normal Hours of Work

3.1 An employer may not set tasks or hours of work that require a worker to work

- (a) more than forty hours in any week;
- (b) on more than five days in any week; and
- (c) for more than eight hours on any day.

3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.

3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

4. Meal Breaks

4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

- 4.2 An employer and worker may agree on longer meal breaks.
- 4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- 4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5. Special Conditions for Security Guards

- 5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.
- 5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6. Daily Rest Period

Every worker is entitled to a daily rest period of at least twelve consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7. Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work {"emergency work"}.

8. Sick Leave

- 8.1 Only workers who work more than 24 hours per month have the right to claim sick-pay in terms of this clause.
- 8.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- 8.3 A worker may accumulate a maximum of twelve days' sick leave in a year.
- 8.4 Accumulated sick-leave may not be transferred from one contract to another contract.
- 8.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- 8.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- 8.7 An employer must pay a worker sick pay on the workers usual payday.
- 8.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is

(a) absent from work for more than two consecutive days; or

(b) absent from work on more than two occasions in any eight-week period.

8.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorized to issue medical certificates indicating the duration and reason for incapacity.

8.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

9. Maternity Leave

9.1 A worker may take up to four consecutive months' unpaid maternity leave.

9.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.

9.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

9.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

9.5 A worker may begin maternity leave

(a) four weeks before the expected date of birth; or

(b) on an earlier date

(i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or

(ii) if agreed to between employer and worker; or

(c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.

9.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

10. Family responsibility leave

10.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances

(a) when the employee's child is born;

(b) when the employee's child is sick;

(c) in the event of a death of -

(i) the employee's spouse or life partner;

(ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

11. Statement of Conditions

11.1 An employer must give a worker a statement containing the following details at the start of employment

- (a) the employer's name and address and the name of the EPWP;
- (b) the tasks or job that the worker is to perform; and
- (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
- (d) the worker's rate of pay and how this is to be calculated;
- (e) the training that the worker will receive during the EPWP.

11.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

11.3 An employer must supply each worker with a copy of these conditions of employment.

12. Keeping Records

12.1 Every employer must keep a written record of at least the following

- (a) the worker's name and position; signed contract by both parties
- (b) copy of an acceptable worker identification certified
- (c) in the case of a task-rated worker, the number of tasks completed by the worker; or daily attendance register
- (d) in the case of a time-rated worker, the time worked by the worker;
- (e) payments made to each worker signed off by worker.

12.2 The employer must keep this record for a period of at least three years after the completion of the EPWP.

13. Payment

13.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

13.2 A worker may not be paid less than the minimum EPWP wage rate of R160,00 per day or per task. This will be adjusted annually on the 1st of March in line with inflation (available CPI as provided by Stats SA six (6) weeks before implementation).

13.3 A task-rated worker will only be paid for tasks that have been completed.

13.4 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

13.5 A time-rated worker will be paid at the end of each month.

13.6 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

13.7 Payment in cash or by cheque must take place

- (a) at the workplace or at a place agreed to by the worker;
- (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
- (c) in a sealed envelope which becomes the property of the worker.

13.8 An employer must give a worker the following information in writing

- (a) the period for which payment is made;
- (b) the numbers of tasks completed or hours worked;
- (c) the worker's earnings;
- (d) any money deducted from the payment;
- (e) the actual amount paid to the worker.

13.9 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

13.10 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

14. Deductions

14.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

14.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

14.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

14.4 An employer may not require or allow a worker to

- (a) repay any payment except an overpayment previously made by the employer by mistake;
- (b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
- (c) pay the employer or any other person for having been employed.

15. Health and Safety

15.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

15.2 A worker must –

- (a) work in a way that does not endanger his/her health and safety or that of any other person;
- (b) obey any health and safety instruction;
- (c) obey all health and safety rules of the EPWP;
- (d) use any personal protective equipment or clothing issued by the employer;
- (e) report any accident, near-miss incident or dangerous behavior by another person to their employer or manager.

16. Compensation for Injuries and Diseases

16.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

16.2 A worker must report any work-related Injury or occupational disease to their employer or manager.

16.3 The employer must report the accident or disease to the Compensation Commissioner.

16.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

17. Termination

17.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

17.2 A worker will not receive severance pay on termination.

	<p>17.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.</p> <p>17.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available.</p> <p>17.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available.</p> <p>18. Certificate of Service</p> <p>18.1 On termination of employment, a worker is entitled to a certificate stating</p> <ul style="list-style-type: none"> (a) the worker's full name; (b) the name and address of the employer; (c) the EPWP on which the worker worked; (d) the work performed by the worker; (e) any training received by the worker as part of the EPWP; (f) the period for which the worker worked on the EPWP; (g) any other information agreed on by the employer and worker.
	<p>Contractor's default in payment to Labourers and Employees</p> <p>Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene. The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.</p> <p>Minimum Number of Workers to be Employed</p> <p>The Contractor shall employ a minimum number of 52 unskilled workers, failure to which the Employer may take such steps to source these workers and incorporate them into the Contractor's workforce without any financial adjustment of the Contract. Should the Contractor continually and deliberately fail to adhere to this provision without the express written consent of the Employer, the Employer shall have the right to take over the project and terminate the Contract in line with the Conditions of Contract.</p> <p>Reporting</p> <p>The Contractor shall submit monthly returns/reports as specified below:</p> <ul style="list-style-type: none"> • Signed Muster rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance. • Plant utilization returns • Progress report detailing production output compared to the programme of works <p>Provision of Hand tools</p> <p>The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions.</p>

Part 1: Contract Data completed by the Employer

Clause	
1.1.1.5	Clause 1.1.1.5 of the GCC is replaced by the following: The “Commencement date” shall be the date the site is handed over to the Contractor.
1.1.1.15	<p>The name of the Employer is the Capricorn District Municipality.</p> <p>The address of the Employer is: Telephone: 015-294-1000 Facsimile: 015-291-4297</p> <p>Address: 41 Biccard street, Polokwane, 0700 Address: Box 4100, Polokwane, 0700</p>
1.1.1.16	The engineer representing the Consultant is Mr Blessing Nyambiya
	<p>The engineer’s address for receipt of communication is: SUPERIOR QUALITY ENGINEERING AND TECHNOLOGIES 8 60 MAGAZYN POLOKWANE 0700 Telephone: (015) 291 1366, Fax: 0865464110 e-mail: admin@superiorengineers.co.za</p>
1.1.1.12 and 5.8	The special non-working days are public holidays, Saturdays, Sundays and the days on which the contractor grants the majority of his permanent workforce leave around the 15 th December and the first Monday of the subsequent year.
3.1	<p>The engineer is required in terms of his appointment with the employer to obtain the following specific approvals from the employer: e.g.,</p> <ol style="list-style-type: none"> 1. Approval of extension of time; 2. Approval of additional costs; 3. Approval of variation orders; 4. Approval of penalties; 5. Approval from Capricorn District Municipality for the utilization of any Contingencies

3.1.3	<p>The Engineer is required to obtain the specific approval of the Employer before executing any of the following functions or duties:</p> <ol style="list-style-type: none"> 1. Nominating the Engineer's Representative in terms of Clause 3.2.1. 2. Delegation of Engineer's authority in terms of Clause 3.2.4. 3. Providing consent for subcontracting part of the contract in terms of Clause 4.4.3. 4. The issuing of further drawings or instructions in terms of Clause 5.9.1 5. The issuing of instructions for dealing with fossils and the like in terms of Clause 4.7. 6. Authorizing the Contractor to repair and make good excepted risks in terms of Clause 8.2.2.2. 7. The issuing of a variation order in terms of Clause 6.3.2. 8. Issuing of instructions to carry out work on a day work basis in terms of Clause 6.4.1.4. 9. Granting permission to work during non-working times in terms of Clause 5.8.1. 10. Suspend the progress of the works in terms of Clause 5.11.1. 11. The issuing of an instruction to accelerate progress in terms of Clause 5.7.3. 12. The reduction of a penalty for delay in terms of Clause 5.13.2. 10. The determination of additional or reduced costs arising from changes in legislation in terms of Clause 6.8.4. 11. The giving of a ruling on a contractor's claim in terms of Clause 10.1.5. 12. The agreeing of an extension to the 28 period in terms of Clause 10.1.5.1. 13. The inclusion of credits in the next payment certificate in terms of Clause 10.1.5.2. 14. The agreeing of the adjustment of the sums for general items in terms of Clause 6.11.1
	<p>The time to deliver the Form of Guarantee within 14 days of the Commencement Date. The Form of Guarantee is to contain the wording of the document included in Clause.2.4 or as supplied by the Employer. The liability for the guarantee shall be for 10% of the contract amount.</p>
5.3	The Works are to be commenced within 14 days of the Commencement Date.
5.6.1	The Works programme is to be delivered within 14 days of the Commencement Date.
8.6.	The amount to be included in the sum insured to cover the value of:
8.6.1.1.2	The value of the materials supplied by the Employer to be included in the insurance sum is R0-00
8.6.1.1.3	The amount to cover professional fees for repair or reinstatement of damage to the works to be included in the insurance sum is R0-00
8.6.1.5	Contractor to provide ALL RISK insurance within 14 days of award.
6.5.1.2.3	The percentage allowance to cover overhead charges is 15% .
5.14 1.1.1.5	The works shall be completed within NINE (9) months exclusive of year end break.
5.13	The penalty for failing to complete the Works is 1.5% of the contract amount per month or pro rata (daily)
6.8.2	<p>The value of the payment certificates is to be adjusted in accordance with the Contract Price Adjustment Schedule, where:</p> <p>The value of "x" is 0,15 The values of the coefficients are: a = Labour b = Contractor's equipment c = Material d = Fuel The urban area nearest to the Site is Polokwane The base month is the month prior to the closing of the Bid, i.e. June 2024</p>

6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%									
6.10.3	The percentage retention on amounts due to the Contractor is 10% of the contract amount.									
6.10.1	Minimum amount of interim payment certificate is R 500 000.00									
6.10.5	Retention of 10% will be deducted on every payment certificate									
7.8	The Defects Liability Period is 12 calendar months after the final completion date									
10.5	Dispute resolution is to be my means of adjudication									
10.7	Disputes are to be referred for final settlement to arbitration.									
Special Clause in terms of RDP	<p>Requirements in terms of government's reconstruction and development programme. Target values In this contract the minimum target values shall be as follows:</p> <table style="margin-left: 40px;"> <tr> <td>Labour Maximisation</td> <td>:</td> <td>30%</td> </tr> <tr> <td>ABE support</td> <td>:</td> <td>10%</td> </tr> <tr> <td>HDI Supervisory Staff</td> <td>:</td> <td>10%</td> </tr> </table> <p>The penalties for not reaching the required target values will be calculated at 20% of the difference between the set target values and the actual target values achieved by the contractor at completion of the works. No bonuses for achieving the set target values are applicable.</p>	Labour Maximisation	:	30%	ABE support	:	10%	HDI Supervisory Staff	:	10%
Labour Maximisation	:	30%								
ABE support	:	10%								
HDI Supervisory Staff	:	10%								

Part 2: Data provided by the Contractor

Clause																																	
1.1.1.9	The contractor is																																
	<p>The contractor's address for receipt of communication is:</p> <p>Telephone:.....</p> <p>Mobile phone:</p> <p>Facsimile:</p> <p>e-mail:</p> <p>Address:</p> <p>.....</p> <p>.....</p> <p>.....</p>																																
6.5.1.2.3	The percentage allowances to cover all charges for the contractor's and subcontractor's profits, timekeeping, clerical work, insurance, establishment, superintendence and the use of hand tools is%.																																
5.14	The Works shall be completed within months as proposed by the contractor.																																
6.8.3	<p>The variation in cost of special materials is:</p> <table border="1" data-bbox="256 1223 1374 1727"> <thead> <tr> <th data-bbox="256 1223 624 1346" rowspan="2">Special material</th> <th colspan="2" data-bbox="624 1223 1066 1346">Unit on which variation will be determined</th> <th data-bbox="1066 1223 1374 1346" rowspan="2">Price for base month ex factory, excluding transport, labour or any other costs.</th> </tr> <tr> <th data-bbox="624 1346 842 1413">Containers</th> <th data-bbox="842 1346 1066 1413">Delivered in bulk</th> </tr> </thead> <tbody> <tr> <td data-bbox="256 1413 624 1469"></td> <td data-bbox="624 1413 842 1469"></td> <td data-bbox="842 1413 1066 1469"></td> <td data-bbox="1066 1413 1374 1469"></td> </tr> <tr> <td data-bbox="256 1469 624 1525"></td> <td data-bbox="624 1469 842 1525"></td> <td data-bbox="842 1469 1066 1525"></td> <td data-bbox="1066 1469 1374 1525"></td> </tr> <tr> <td data-bbox="256 1525 624 1581"></td> <td data-bbox="624 1525 842 1581"></td> <td data-bbox="842 1525 1066 1581"></td> <td data-bbox="1066 1525 1374 1581"></td> </tr> <tr> <td data-bbox="256 1581 624 1637"></td> <td data-bbox="624 1581 842 1637"></td> <td data-bbox="842 1581 1066 1637"></td> <td data-bbox="1066 1581 1374 1637"></td> </tr> <tr> <td data-bbox="256 1637 624 1693"></td> <td data-bbox="624 1637 842 1693"></td> <td data-bbox="842 1637 1066 1693"></td> <td data-bbox="1066 1637 1374 1693"></td> </tr> <tr> <td data-bbox="256 1693 624 1727"></td> <td data-bbox="624 1693 842 1727"></td> <td data-bbox="842 1693 1066 1727"></td> <td data-bbox="1066 1693 1374 1727"></td> </tr> </tbody> </table> <p data-bbox="256 1727 647 1760">*State unit in appropriate column</p>			Special material	Unit on which variation will be determined		Price for base month ex factory, excluding transport, labour or any other costs.	Containers	Delivered in bulk																								
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	Containers	Delivered in bulk																															



CAPRICORN DISTRICT MUNICIPALITY

C1.3 Form of Guarantee

Contract No. INF-W09/2024/2025

WHEREAS **The CAPRICORN DISTRICT MUNICIPALITY** (hereinafter referred to as the Employer”) entered into, a Contract with:

.....
.....
(Hereinafter called “the Contactor”) on the day of 20.

.....
for the construction of **STOCKS REGIONAL WATER SCHEME PHASE 1: CONTRACT E; 5ML SERVICE RESERVOIR FOR LEDWABA (MMAKOTSE EXTENSION), MMAKOTSE, MOTANTANYANE AND HWELERENG VILLAGES**

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

AND WHEREAS has / have at the

request of the Contractor, agreed to give such guarantee;

NOW THEREFORE WE do hereby

guarantee and bind ourselves jointly and severally as Guarantor and Co-principal Debtors to the Employer under renunciation of the benefits of division and execution for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

1. The Employer shall, without reference and / or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the completion date of the works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the completion date which the Employer may make, give, concede or agree to under the said Contract.
2. This guarantee shall be limited to the payment of a sum of money.
3. The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor.
4. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.

5. Our total hereunder all not exceed the Guaranteed Sum of
..... liability. Rand (in words); R
..... (in figures)

6. The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon our liability hereunder shall cease.

7. We hereby choose our address for the serving of all notices for all purposes arising here from as

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

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

Signature

Duly authorized to sign on behalf of
.....

Address
.....

.....
.....

.....
.....

As witnesses:

1

2



CAPRICORN DISTRICT MUNICIPALITY

C1.4 Occupational Health and Safety

AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

THIS AGREEMENT IS made at

on the day of in the year

Between CAPRICORN DISTRICT MUNICIPALITY (hereinafter called "the Employer") of the one part, herein represented by

In his capacity as

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

and

(hereinafter called "the Mandatory") of the other part, herein represented by

in his capacity as

and being duly authorized by virtue of a resolution appended hereto as Annexure A;

WHEREAS the Employer requires certain works be constructed, viz **STOCKS REGIONAL WATER SCHEME PHASE 1: CONTRACT E: 5ML SERVICE RESERVOIR FOR LEDWABA (MMAKOTSE EXTENSION), MMAKOTSE, MOTANTANYANE AND HWELERENG VILLAGES** has accepted a Tender by the Mandatory for the construction, completion and maintenance of such Works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

NOW THEREFORE THIS AGREEMENT WITNESSES AS FOLLOWS:

- 1 The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this Contract.
- 2 This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or engineer requiring him to commence the execution of the Works, to either -
 - (a) the date of the Final Certificate issued in terms of Clause 55 of the Committee of Land Transport Officials General Conditions of Contract 1998 (hereinafter referred to as "the GCC"), as contained in Volume 1 of the Contract Documents pertaining to this Contract, or
 - (b) The date of termination of the Contract in terms of Clauses 57, 58 or 59 of the GCC.
- 3 The Mandatory declares himself to be conversant with the following:

- (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:
 - (i) Section 8 : General duties of Employers to their employees
 - (ii) Section 9 : General duties of Employers and self-employed persons to persons other than employees
 - (iii) Section 37 : Acts or omissions by employees or mandataries
 - (iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement
- (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his subcontractors.

4 In addition to the requirements of Clause 36 of the GCC (as amended by Special Condition of Contract contained in Volume 3 of the Contract Documents pertaining to this Contract) and all relevant requirements of the above-mentioned Volume 3, the Mandatory agrees to execute all the Works forming part of this Contract and to operate and utilize all machinery, Plant and equipment in accordance with the Act.

5 The Mandatory is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Employer.

6. The Mandatory warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No 130 of 1993), which cover, shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

7. The Mandatory undertakes to ensure that he and/or subcontractors and/or their respective employers will at all times comply with the following conditions:

- a) The Mandatory shall assume the responsibility in terms of Section 16.1 of the Act. The Mandatory shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatory obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
- b) All incidents referred to in the Act shall be reported by the Mandatory to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
- c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Act into any incident involving the Mandatory and/or his employees and/or his subcontractors.

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

SIGNED FOR AND ON BEHALF OF THE EMPLOYER :

Witness Witness

(Name) (Name)
 (Print) (Print)

SIGNED FOR AND ON BEHALF OF THE MANDATARY :

Witness Witness

(Name) (Name)
 (Print) (Print)

ANNEXURE A

CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

The signatory for the company that is the Contractor in terms of the above-mentioned Contract and the Mandatory in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the board of directors.

By resolution of the board of directors passed at a meeting held on 20.....,
Mr//Ms whose signature
appears below, has been duly authorised to sign the AGREEMENT IN TERMS OF THE
OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 OF 1993) on behalf of
.....
.....

SIGNED ON BEHALF OF THE COMPANY :

IN HIS/HER CAPACITY AS :

DATE :

SIGNATURE OF SIGNATORY :

WITNESS: WITNESS :

NAME (in capitals) : NAME :



CAPRICORN DISTRICT MUNICIPALITY

C2.1 Special Conditions of Contract

The following special conditions of contract, which include amendments to, omissions of or additions to certain clauses of the "General Conditions of Contract for Construction Works, Second Edition (2010) and 3rd Edition(2015)", shall be applicable to the works. In the case of conflict with the mentioned general conditions of contract, these special conditions of contract shall be binding and applicable to the contract.

Each clause with the prefix SCC shall refer to the concurrent clause in the general conditions of contract. Such clause shall substitute, supplement or amend the clause with the same number in the general conditions of contract. Where there is no such concurrent clause in the general conditions of contract the SCC clause shall be numbered as a new clause in the special conditions of contract.

1. DEFINITIONS, INTERPRETATIONS AND GENERAL PROVISIONS

SCC 1.1.1.15 EMPLOYER

Add the following to GCC 1.1.1.15:

The employer is the **Capricorn District Municipality**, and includes any persons appointed by the Employer. The official address is:

Capricorn District Municipality
41 Biccard Street
PO Box 4100
POLOKWANE
0700

SCC 1.1.1.16 ENGINEER

Add the following to GCC 1.1.1.16:

The Engineer means:

SUPERIOR QUALITY ENGINEERING AND TECHNOLOGIES 8
60 MAGAZYN
POLOKWANE
0700
Telephone: (015) 291 1366
Fax: 0865464110

2. AMBIGUITY IN DOCUMENTS

Add the following to GCC 2.4.1:

The several documents forming the contract shall rank in the following order of precedence:

- a) contract agreement;
- b) tender form and appendix;
- c) special conditions of contract;
- d) project specifications;
- e) general conditions of contract;
- f) drawings;
- g) standardised specifications (SANS 1200) and particular specifications;
- h) schedule of quantities and summary;
- i) statutory regulations and requirements;
- j) standard SANS specifications (not SANS 1200);
- k) other standard specifications.

If the requirements of any part of the tender document contradict any other part, the document in the highest position on the above order of precedence, shall have preference and apply.

3. PROGRAMME OF THE WORKS

SCC 5.6.1 PROGRAMM

Add the following to GCC 5.6.1:

The critical path of the works shall also be stipulated clearly in the programme.

4. INSTRUCTIONS AND DRAWINGS

SCC 5.9.1 DRAWINGS AND INSTRUCTIONS

Add the following to GCC 5.9.1:

The Contractor is entitled to three (3) free sets of paper plans for normal use and one (1) free set of paper plans on which to enter "as built" information. He shall also be supplied with one (1) free copy of the contract document. These drawings and contract document shall be issued to the Contractor, at the time of commencement of the contract, by the Engineer.

SCC 5.9.7 ENGINEER TO APPROVE CONTRACTOR'S DESIGNS AND DRAWINGS

Add the following to GCC 5.9.7:

Although the Engineer may approve plans and designs of the Contractor, this does not exempt the Contractor from his responsibility. The professional responsibility for such designs shall be that of the Contractor and his Engineer.

5. CLEARANCE OF SITE

SCC 5.15.1 CLEARANCE OF SITE ON COMPLETION

Add the following to GCC 5.15.1:

After completion of the works, the Contractor shall obtain certificates from all concerned land owners on whose property works have been executed, stating that they are satisfied with the condition of their property, which will normally include finishing of pipe trenches and structures, clearance and finishing of all stone quarries, borrow pits, diversions, private or tertiary or haulage roads that have been used for the transport of material, waste material, fencing, gates, etc on their properties. These certificates shall all be handed to the Engineer before he issues the certificate of completion. Notwithstanding a certificate of completion will not be issued if the work is not to the satisfaction of the Engineer.

6. CONTRACTOR'S EMPLOYEES

SCC 4.10.1 ENGAGEMENT OF EMPLOYEES

Add the following to clause 4.10.1:

In the event that the Contractor does not pay local labour or any outside agency employed on a monthly basis, the Employer has the automatic right to deduct such wages from the Contractor's next payment certificate. This will be deducted from either monies due to the Contractor or from retention already retained on the project. Payments to the local labour or outside agency will be made by cession.

7. MATERIALS, WORKMANSHIP AND CONSTRUCTIONAL PLANT

SCC 7.2.1 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following to GCC 7.2.1:

No second-hand or reject material shall be used without written permission from the Engineer.

SCC 7.4.4 COST OF TEST SPECIMENS AND TESTS

Substitute GCC 7.4.4 with the following:

- (a) It is deemed that the Contractor has made provision in his tender for all such services and tests that are required from him. It is the duty of the Contractor to, at his own cost and by means of the necessary tests, prove to the Engineer that the works and compaction prescribed, comply with the specification. The Contractor shall, at his own expense, institute a quality-control system and provide experienced Engineers, foremen, surveyors, materials technicians, and technical staff, together with all transport, instruments, and equipment, to always ensure adequate supervision and positive control of the works.

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

The Contractor's attention is drawn to the provisions of the various standardised specifications regarding the minimum frequency of testing that will be required for process control. The Contractor, shall at his own discretion, increase this frequency where necessary to ensure adequate control, at his own cost.

On completion of every part of the work and submission thereof to the Engineer for examination, the Contractor shall furnish the Engineer with the results of all relevant tests, measurements and levels to indicate compliance with the specifications.

8. EXAMINATION OF THE WORKS

SCC 7.5.1 EXAMINATION OF WORK BEFORE COVERING UP

Add the following to GCC 7.5.1:

The Contractor shall give the Engineer a reasonable time to accommodate examinations in his programme, in which case a time for inspection can be agreed upon.

SCC 7.5.3 NOTICE TO BE GIVEN

Add the following to paragraph 2 of GCC 7.5.3:

If the Engineer attends with the purpose of examining any part or materials of the works at any time and date as agreed upon with the Contractor, and it is found that the works or materials are not yet ready for inspection, the Contractor shall be responsible for the costs of such a visit by the Engineer.

9. INDEMNIFICATIONS

SCC 8.4.1 LIABILITY

Add the following to GCC 8.4.1:

The Contractor indemnifies the Employer against any liability in respect of damage to or physical loss of the property of any person or injury to or death of any person due to not complying with the Occupational Health and Safety Act No 85 of 1993.

Attached in the tender document is the form "Contract between Employer and Contractor" to be completed by the successful Contractor.

SCC 8.6.1 INSURANCES

Add the following to GCC 8.6.1:

The amount shall be per occurrence. The number of occurrences is unlimited.

Add the following to GCC 8.6.6:

Within 14 days of receipt of the letter of acceptance of his tender, the Contractor shall submit proof of payment to the Engineer.

SCC 35.9 CONTRACTOR AND EMPLOYER TO COMPLY

The Contractor and the Employer shall comply with the terms and conditions of the insurance policies.

As soon as a claim arises, the Contractor shall immediately submit the necessary claims on behalf of himself and the Employer. Copies of all claims and relevant documentation shall be submitted to the Engineer.

SCC 35.10 TIME TO REPAIR DAMAGES

If any insurance claim arises, the Contractor shall immediately proceed with the necessary repairs after the assessor, irrespective of whether the claim has been settled, has established the damage. No extension of time shall be granted if there is a waiting period for the settlement of the claim and all costs or losses which the Contractor may have regarding lost time, shall be deemed as covered by the insurance claim, or shall be borne by the Contractor himself.

10. VARIATIONS

SCC 6.5 DAYWORK

Add the following to GCC 6.5.1

"Total remuneration" shall include the following:

- Basic wage
- Holiday fund stamp
- Unemployment insurance
- Employee's compensation
- Service bonus

Add the following to SCC 6.5.2:

The percentage allowance stated in the appendix shall also include travelling cost or travelling allowance (transport of workmen with the Contractor's transport vehicles or transport vehicles hired by the Contractor or for which the Contractor paid), and residence allowance and other wages that are payable to the workmen on the date for submission of tenders.

11. SUSPENSION OF THE WORKS

SCC 5.11.1 SUSPENSION OF THE WORKS

Add the following to GCC 5.11.1:

No payment shall be made for costs incurred by recompiling a construction programme. In the case of suspension of work, either for a change in sequence or as a result of GCC 5.11.1 to 5.11.3, no payment shall be made for such costs resulting from this.

12. EXTENSION OF TIME FOR COMPLETION

SCC 5.12.1 TIME FOR COMPLETION

Add the following to GCC 5.12.1:

The time for completion shall exclude the period of builder's holidays from 19 December till 5 January , as well as other special non-working days and public holidays.

SCC 5.12.1 EXTENSION OF TIME FOR COMPLETION

Add the following to GCC 5.12.1:

Extension of the time for completion as a result of extra or additional work and unfavourable physical conditions shall only be granted if such work or conditions influence work on the critical path of the programme. If no definitive method for extension of time due to weather conditions and rain is specified, extension of time as a result of this shall also only be applicable if it influences the critical path of activities.

SCC 5.12.2 SOME REASONS FOR EXTENSIONS OF TIME

Add the following to GCC 5.12.2:

5.12.2.2 Abnormal climatic conditions.

No extension of the time for completion shall be granted on the grounds of normal rainfall conditions, but extension of time in terms of clause 5.12.1 of the general conditions of contract on the grounds of abnormal rainfall or wet conditions shall be calculated separately for each calendar month or part thereof, according to the following formula. It shall be calculated as follows for the time for completion, including any extension thereof:

$$V = (Nw - Nn) + \left(\frac{Rw + Rn}{X} \right)$$

V = Extension of time for calendar days of the calendar month concerned. If the value of V is negative and the absolute value thereof is greater than Nn, V is taken as negative Nn.

Nw = Actual number of days during calendar month on which a rainfall of Y mm or more is recorded.

Nn = Average number of days in the calendar month concerned on which a rainfall of Y mm or more is recorded in terms of existing rainfall data.

Rw = Actual rainfall for the calendar month concerned in mm.

Rn = Average rainfall for the calendar month in mm deduced from existing rainfall data.

The total extension of time is the algebraic sum of the monthly totals for the period concerned. Extension of time for parts of a month shall be calculated by using pro rata values of Nn and Rn. If the algebraic sum of the monthly totals is negative, no reduction of the time for completion as a result of rainfall shall be applicable.

This formula does not take any delays as a result of flood damage, which may cause further or simultaneous delays; into consideration and flood damage shall be treated separately for purposes of extension of time for completion.

The factor $(Nw - Nn)$ is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall exceeds Y mm. The factor $(Rw - Rn)/X$ is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall does not exceed Y mm, but on which wet conditions will hamper or disrupt work.

For the purpose of this contract the values of Nn, Rn, X and Y will be the relevant values of the nearest weather station to the site as supplied by the South African Weather Buro. It is the sole responsibility of the Tenderer to acquaint himself with the relevant values. These values shall, at the start of the contract be submitted to the Engineer for scrutiny and approval.

SCC 5.12.2.5 AVAILABILITY OF PETROLEUM PRODUCTS

The tender shall be based on the available supply of petroleum products required for the completion of the works. If, during the contract period, for reasons outside the control of the Contractor, a restriction or breakdown in the supply of petroleum products may occur, which has an actual influence on the execution of the works for a period of at least thirty (30) days, the Contractor shall make all reasonable efforts to complete the works and he shall be entitled to an extension of the time for completion and he shall also be entitled to such an adjustment of the contract price as deemed reasonable by the Engineer, with consideration of all materials and relevant factors directly responsible or having a direct effect on such restriction or breakdown, with the inclusion of the Contractor's site and overhead costs relevant to the contract.

SCC 5.12.2.5 EXTENSION OF TIME DUE TO SHORTAGE OF MATERIAL

If, during the preparation of his tender or during construction, the Contractor bases his unit prices on prices obtained from specific material or specific suppliers, it will be accepted that the Contractor has ascertained that such material shall be available on a continuous basis for the execution of the contract.

No extension of time shall be granted if material cannot be obtained locally, but is available from other sources in the country, and no additional remuneration shall be granted for increased costs due to obtaining material from sources in other parts of the country.

If suppliers cannot adhere to the quoted delivery dates, any delays resulting from this shall be considered as a matter between the supplier and the Contractor. Extension of time could be granted under such conditions after complete proofs have been submitted to and accepted by the Engineer, but without any financial implications for the Employer.

13. INTERIM PAYMENTS

SCC 6.10.2 VALUATION OF MATERIAL BROUGHT ONTO SITE

Add the following to GCC 6.10.2:

Material or goods for which payment is made in terms of this clause, shall be identified uniquely and be stored in a space approved by the Engineer, and which will only be used for the purposes of the Employer.

SCC 6.10.3 RETENTION MONEY

Add the following to GCC 6.10.3:

No limit of retention money will be applicable only the % as stated in the Contract Data will be applicable on the contract.

SCC 6.10.5 EMPLOYER'S OBLIGATION TO PAY

Replace GCC 6.10.5 with the following:

The Engineer shall deliver to the Employer and the Contractor the payment certificate referred to in clause 49.1 within 07 (seven) days after the receipt by the Engineer of the Contractor's said statement, and the Employer shall pay the amount due to the Contractor within 65 (sixty-five) days after receipt by the Employer of the payment certificate signed by the Engineer.

SCC 6.10.1 VALUE ADDED TAX

Add the following to GCC 6.10.1:

Value added tax (VAT) shall be calculated on each payment certificate, but it shall remain the responsibility of the Contractor to issue a tax invoice for the certified amount. The Contractor is responsible for the payment of VAT.

14. DEFECTS

SCC 7.8.1 MAKING GOOD OF DEFECTS

Add the following to GCC 7.8.1:

If it is deemed necessary in the opinion of the Engineer, the defects liability period after repairs can be extended for a further period of twelve months or for a period to the discretion of the Engineer, as regards the relevant part of the works that is made good.

15. ADD THE FOLLOWING ADDITIONAL CLAUSE/S

SCC 4.3.1 COMPLIANCE WITH APPLICABLE LAWS

The Contractor shall be conversant with all the requirements, regulations, and standards of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as “the Act” and undertakes to execute all the works forming part of this Contract and to operate and utilise all machinery, plant, and equipment in accordance with the Act.

The Contractor shall, from the commencement date of the Contract up to completion or termination thereof, be the Employer’s mandatory regarding occupational health and safety for all activities on the site but without derogating from his status in his own right as an employer or a user in accordance with the Act.

The Contractor is responsible for the compliance with the Act by all his subcontractors, whether or not nominated and/or approved by the Employer.

The Contractor shall, when called upon to do so, enter into and execute an Agreement, as provided for under Section 37(2) of the Act, with the Employer. The Agreement in the relevant form shall be prepared at the expense of the Employer.



CAPRICORN DISTRICT MUNICIPALITY

C3. Schedule of Quantities

C3.1 Labour-Intensive Works

The following wording, as appropriate, should be included in the pricing Instructions and in the bills of quantities in the pricing data:

1. Those parts of the works to be constructed using labour-intensive methods should be marked in the bill of quantities with the letters LI either in a separate column or as a prefix or suffix against every item so designated (as illustrated in the table below). The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a deviation from the contract. The items marked with the letters LI are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour-intensive specification in the Scope of Works.
2. Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target.
3. Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.
4. The contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour return shall still be submitted as per frequency and timeframe stipulated by the employer. The contractor's invoice shall not be paid until all pending labour information has been submitted in order for the employer to report on EPWPRS monthly.

C3.2 Preamble to Schedule of Quantities

1. The general conditions of contract, the special conditions of contract (if any), the specifications (including the project specification) and the drawings are to be read in conjunction with the schedule of quantities.
2.
 - a) The schedule comprises items covering the Contractor's profit and costs of general liabilities and of the construction of temporary and permanent works.
 - b) The Contractor is at liberty to insert a rate of his own choosing for each item in the schedule and his attention is drawn to the fact that the Contractor has the right, under various circumstances, to payment for additional works carried out and that the Engineer is obliged to base his assessment of the rates to be paid for such additional work on the rates inserted in the schedule by the Contractor.
 - c) Clause 8 of each standardised specification and the measurement and payment clause of each particular specification, read together with the relevant clauses of the project specification, set out what ancillary or associated activities are included in the rates for the operations specified.

3. Descriptions in the schedule of quantities are abbreviated and the schedule has been drawn up generally in accordance with the latest issue of Civil Engineering Quantities¹. Should any requirement of the measurement and payment clause of the applicable standardised specification², or the project specification², or the particular specification(s)² conflict with the terms of the schedule or, when relevant, Civil Engineering Quantities¹, the requirement of the standardised, project or particular specification, as applicable, shall prevail.
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made for waste.
5. The prices and rates to be inserted in the schedule of quantities are to be the full inclusive prices to the Employer for the work described under the several items, value added tax excluded. Such prices shall cover all costs and expenses that may be required in and for the construction of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the quotation is based.
6. A price or rate is to be entered against each item in the schedule of quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the schedule.
7. The Contractor must price each item in the schedule of quantities in **BLACK INK**.
8. **All prices and rates shall exclude value added tax (VAT)**. The Contractor shall calculate value added tax and enter it at the end of the summary of the schedule of quantities.
9. For the purposes of this Schedule of Quantities, the following words shall have the meanings hereby assigned to them:

Unit	:	The unit of measurement for each item of work as defined in the Specifications.
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of measurement at which the Tenderer tenders to do the work.
Amount	:	The product of the quantity and the rate tendered for an item
Sum	:	An amount tendered for an item, the extent of which is described in the Schedule of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.
Prime Cost (or PC item)	:	A sum fixed by the Engineer and entered in the Schedule of Quantities as the net sum provided to cover the cost of specific goods or materials to be supplied under the contract, or the net sum to be paid by the Contractor to merchants or others for such articles or materials. ¹
Provisional Sum	:	A sum of money fixed by the Engineer and entered in the Schedule of Quantities to provide for work not defined at the tender stage and includes any allowance specifically made for unforeseen contingencies. ¹
Extra Over (or EO)	:	Qualifies an operation (or combination of operations) which is common in a varying degree to a number of other operations and which is scheduled once as "extra over" those other operations in order to avoid a multiplicity of items each reflecting the degree to which the common operations apply. The term "extra over" invariably denoted double measurement, no deduction being made from one on account of the other. ¹

10. The units of measurements indicated in the Schedule of Quantities are metric units.

The following abbreviations are used in the Schedule of Quantities:

mm	=	millimetre
m	=	metre
km	=	kilometre
km-pass	=	kilometre-pass
m ²	=	square metre
m ² -pass	=	square metre-pass
ha	=	hectare
m ³	=	cubic metre
m ³ -km	=	cubic metre-kilometre
/	=	litre
kl	=	kilolitre
kg	=	kilogram
t	=	ton (1 000 kg)
no	=	number
%	=	percentage
kW	=	kilowatt
PC Sum	=	prime cost sum
Prov. Sum	=	provisional sum
kPa	=	kilopascal
R/only	=	Rate only
W/day	=	Work day

-
- 1) The standard system of measurement of Civil Engineering Quantities of South Africa published by the South African Institution of Civil Engineers.
 - 2) See definition in sub clause 2.1 of Part 1 of SABS 0120: Format and Contents.

11 Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column or as a prefix or suffix against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a deviation from the contract. The items marked with the letters 'LI' are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour-intensive specification in the Scope of Works.

12 Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target.

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

DAY WORK LIST

GENERAL

Contractors must complete this list, which will be used to assess the value of work that the Engineer instructs in writing to be done on a day work basis, all in agreement with clause 6.5 of the General Conditions of Contract for Construction Works, Second Edition, 2010 and coupled Special Conditions of Contract. All the rates are fixed and shall be binding till the issuing of the final certificate, except for statutory increases that are announced from time to time.

LABOUR COSTS

Rates for labour as listed below shall include all the allowances as specified in the General Conditions of Contract for Construction Works, Second Edition of 2010, third edition of 2015 and Special Conditions of Contract. The extra allowance, applicable on Labour costs listed below, is given in the tender appendix and must not be taken into account in this list.

Overtime costs incurred by this contract shall be paid in the same proportion as the amounts actually paid to the employees.

DESCRIPTION	UNIT	RATE
Unschoolled labour	Hour	R
Half- Schooled labour	Hour	R
Pipe layer	Hour	R
Ganger	Hour	R
Foreman / Section leader	Hour	R
Brick layer	Hour	R
Plumber	Hour	R

EQUIPMENT COSTS

Full comprehensive hourly rates, which also include the cost of operators, must be listed below. Rates must also include all the costs of consumable items, maintenance, depreciation, tools, and all other coincidences that shall be necessary to operate the equipment for the purpose it is designed for. The rates must also include all the overhead costs, profits, site supervision, insurance, holidays with payment, travelling costs (or travelling allowances) and residence allowances of operators and any other allowances that are applicable on equipment. The Tenderer must list under each heading the make and specification of the equipment available.

DESCRIPTION	UNIT	RATE
1. Excavators	Hour Hour Hour	..... ..... .....
2. Front-end loaders	Hour Hour Hour Hour	..... ..... ..... .....
3. Trucks (m ³ specified)	Hour Hour Hour Hour	..... ..... ..... .....
4. Water truck (litres specified)	Hour Hour Hour Hour	..... ..... ..... .....
5. Tractor & Trailer	Hour Hour Hour	..... ..... .....
6. Compressor	Hour Hour Hour Hour	..... ..... ..... .....

DESCRIPTION	UNIT	RATE
7. Concrete mixer (litres specified)	Hour Hour Hour Hour	..... ..... ..... .....
8. "Dumper"(m ³ specified)	Hour Hour Hour Hour	..... ..... ..... .....
9. Water pumps 75mm..... 100mm..... 150mm.....	Hour Hour Hour	..... ..... .....
10. Compactors Plate	Hour Hour Hour Hour	..... ..... ..... .....
11. Other equipment	Hour Hour Hour Hour	..... ..... ..... .....



CAPRICORN DISTRICT MUNICIPALITY

C4.1 Scope of Work

4.1.1. Employer's objectives

The employer's objectives are to deliver public infrastructure using labour-intensive methods in accordance with EPWP Guidelines. Employment Creation will benefit the entire local community. Accredited training providers will provide in-service training opportunities to learners waiting to graduate from various institutions.

The contractor shall engage in his management and supervisory staff in labour intensive works that have completed the skills programs that benefit them National qualification frameworks i.e NQF Level 2, 4 and 5 to run the project.

The construction of Stocks Regional Water Scheme Phase 1: Contract E 5MI service reservoir for Ledwaba (Mmakotse Extension), Mmakotse, Motantanyane and Hwelereng Villages

The works entails the followings:

- Construction 5MI Concrete Reservoir with 2 inlets (with 2 bulk water meters), 400mm diameter and 450mm diameter and the discharge, 400mm diameter (with 1 bulk meter)
- Concrete palisade fencing around reservoir
- Construction of access road
- Construction of Guard House
- Electrical works and telemetry

4.1.2 Extent of the works

The major items of works to be carried out under this contract include the following but are not limited it:

General and Others

- i) Establishment of camp and plant on site
- ii) Discovery, exposing and demarcation of existing services to be protected and relocated
- iii) Protection and relocation of services as directed by the Employer 's Agent
- iv) Excavation mostly by Hand for pipe trenches on the road reserve and inside stands
- v) Excavations by Construction Machinery in most of the excavations
- vi) Equipping and electrification of existing boreholes
- vii) Commissioning of the works is not necessarily complete and shall not limit the works for twelve months period. The description of the works is not necessarily complete and shall not limit the work to be carried out by the contractor under this Contract.

4.1.3 Overview of the works

On this Contract the aim is to provide a basic level of services, with regards to improve aspects of the current conditions. The Contract will entail a provision of the services as listed in the Project Specification. Also, with regards to EPWP requirements, labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work. Time is of the essence for this contract. The Tenderer shall state the time in calendar

months required by him/her to complete the Works. Tenderers offering early completion dates will generally be more favourably received, other things being equal.

4.1.4 Labour-Intensive Works

Labour-intensive tasks/works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work.

4.1.5 Labour-Intensive Competencies of Supervisory and Management Staff

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Page 112) at NQF outlined in Table 1

4.1.6 Location of the works

The project is located about 60km north east of Polokwane town and situated at Ledwaba (Mmakotse Extension), Mmakotse, Motantanyane and Hwereleng villages within the jurisdiction of Capricorn District Municipality in Limpopo Province. The nearest business centre being Lebowakgomo business centre.

The site has the following coordinates:

Village Name	Co - ordinates	
	Latitude (S)	Longitude (E)
Hwereleng	-24.356575°	29.457426°
Mmakotse	-24.326385°	29.436148°
Ledwaba (Mmakotse Extension)	-24.309314°	29.434885°
Motantanyane	-24.336902°	29.430270°

Locality Details

- Province : Limpopo Province
- District : Capricorn District Municipality
- Municipality : Capricorn District Municipality

4.1.7 Temporary works

The Contractor is to make allowance for accommodation of traffic in accordance of traffic with the South African Road Traffic Signs Manual and the drawings contained in this document.

The Contractor is to ensure that he obtains the necessary way leaves and departmental approvals prior to commencing with any works within a road reserve or on public property

The Contractor shall provide, erect, maintain and remove on completion of the Contract, ample temporary offices and sheds for the proper storage of perishable materials and for the use of his workmen.



CAPRICORN DISTRICT MUNICIPALITY

C4.2 Drawing Descriptions

The following drawings are applicable to the contract:

General

-List of Drawings

Key Plans

-Key Plan

Layout Plans

-General Layout Plan
-Reservoir Layout Plan

Standard Details

-Typical Details for access ladders
-Valve chambers details
-Floor construction joints
-Access manholes
- Roof ventilator details

4.2.1 Key plans

All key plans for this type of project are included in the tender document as “Part C.8 Drawings.”

4.2.2 Typical details

All typical details for this type of project are included in the tender document as “Part C.8 Drawings.”

4.2.3 Civil engineering drawings

The drawings used for setting up the Bills of Quantities are as indicated above in paragraph 4.2.1 and 4.2.2.



CAPRICORN DISTRICT MUNICIPALITY

C4.3 Procurement

3.4.1 Preferential procurement procedures

The works shall be executed in accordance with the conditions attached to preferences granted in accordance with the referencing schedule.

3.4.2 Scope of mandatory subcontract work

The following portions of the works shall be subcontracted to CIDB registered contractors in accordance with the subcontracting procedures described hereunder:

Competitive Bids shall be invited in respect of each of the above portions of the works in accordance with the relevant provisions of the latest edition of the CIDB Standard for Uniformity in Construction Procurement. The Contract Data in the associated procurement documents shall be based on the use of BIFSA Non-Nominated Subcontract for use with the JBCC Series 2000 Principal Building Agreement / CIDB Standard subcontract (labour only) / JBCC series 2000 Nominated / Selected Subcontract Agreement / SAFCEC General conditions of subcontract (2003 edition) (select appropriate option) / NEC Engineering and Construction Subcontract / NEC Engineering and Construction Short Subcontract with minimal project specific variations and amendments that do not change their intended usage.

The Employer together with the Contractor shall evaluate the Bids received in accordance with the provisions of the Standard Conditions of Bid contained in Annex F of Standard for Uniformity in Construction Procurement. The evaluation panel shall comprise equal representatives from the Employer and from the Contractor.

The Contractor shall without delay enter into contract with the successful Bidding subcontractor based on their accepted Bid submission. The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.



CAPRICORN DISTRICT MUNICIPALITY

C4.4 Construction

4.4.1 Setting out of Works (Sub clause 5.1.1)

The Employer shall arrange for the Contractor to be given sufficient reference pegs from which to work. The value of all bench marks shall be given in writing. The Contractor shall bear the cost of any re-survey and the cost of re-establishment or checking of any pegs, bench marks, etc. disturbed, destroyed or interfered with in any way and the cost of any survey to prove the accuracy of the setting out after any disturbance of or interference with any peg or bench mark. All surveys or re-survey shall be by Surveyors appointed by the Employer.”

4.4.2 Applicable national and international standards

SABS 1200

4.4.3 Particular / generic specifications

The relevant provisions of the SABS 1200 (1981 edition) shall apply to the contract with the following amendments:

1115 Replace clause with the following:

The general conditions of contract are the General Conditions of Contract for Construction Works (2010/2015) as published by the South African Institution of Civil Engineering read in conjunction with the Contract Data.

1202 Replace “Clause 15” with “Clause 12”.

1206 Replace the first sentence with the following:

The contractor shall comply with all legal provisions in regard to surveying and setting out work.

1209(e) Replace “Clause 52” with “Clauses 29 and 49.2”.

1210 Replace “Clause 54” with “Clause 51”.

1212(1) Replace “Clause 49” with “Clause 46”.

1215 Replace “Clause 45” with “Clause 42”.

1217 Replace “Clause 35” with “Clause 31”.

1303 Replace “Clauses 49 and 53” with “Clause 50”.

13.01(3) Replace “Clauses 12 and 45” with “Clauses 1.1.4 and 42”.

14.03(c) Replace “Clause 40(1)” with “Clause 37”.

1505 Replace “Clauses 40 and 53” with “Clause 37”.

3204(b) (iii) Replace “Clauses 40 and 53” with “Clause 37”.

4.4.4 EPWP labour intensive specification

4.4.4.1 Labour intensive competencies of supervisory and management staff

Contractors having a CIDB contractor grading designation of **6 CEPE / 7 CE and higher** shall only engage supervisory and management staff in labour intensive works who have either completed, or for the period 1 November 2014 to 30 June 2015, are registered for training towards, the skills programme outlined in Table 1.

The managing principal of the contractor, namely, a sole proprietor, the senior partner, the managing director or managing member of a close corporation, as relevant, having a contractor grading designation of **6 CEPE/7CE** shall have personally completed, or for the period 1 November 2014 to 30 June 2015 be registered on a skills programme for the NQF level 2. All other site supervisory staff in the employ of such contractors must have completed, or for the period 1 November 2014 to 30 June 2015 be registered on a skills programme for, the NQF level 2 unit standards or NQF level 4 unit standards.

Table 1: Skills programme for employer staff

Personnel	NQF	Unit Standard Title	Skills Programme Description
Senior management and professionals	7	Develop and Promote Labour- Intensive Construction Strategies or equivalent QCTO qualification	Skills Programme against this single unit standard or part qualification
Middle (technical)	5	Manage Labour-Intensive Construction Projects or equivalent QCTO qualification	Skills Programme against this single unit standard or part qualification

Table 2: The Unit Standards For Contractors Or Equivalent QCTO Qualification

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader	2	Apply Labour-Intensive Construction Systems and Techniques or equivalent QCTO qualification	This unit standard must be completed, and any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage or equivalent QCTO qualification	
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services or equivalent QCTO qualification	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures or equivalent QCTO qualification	
Foreman/ supervisor	4	Implement Labour-Intensive Construction Systems and Techniques or equivalent QCTO qualification	This unit standard must be completed, and any one of these 3 unit standards
		Use Labour-Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage or equivalent QCTO qualification	
		Use Labour-Intensive Construction Methods to Construct and Maintain Water and Sanitation Services or equivalent QCTO qualification	
		Use Labour-Intensive Construction Methods to Construct, Repair and Maintain Structures or equivalent QCTO qualification	
Site Agent / Manager	5	Manage Labour-Intensive Construction Processes or equivalent QCTO qualification	Skills Programme against this single unit standard or part qualification

4.4.4.2 Employment of unskilled and semi-skilled workers in labour-intensive works

4.4.4.2.1 Requirements for the sourcing and engagement of labour.

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

4.4.4.2.1.2 The minimum rate of pay as set for the EPWP is **R 160 per task or per day.**

4.4.4.2.1.3 Tasks established by the contractor must be such that:

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

4.4.4.2.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 3.4.4.2.1.3.

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

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

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

- a) 60 % women;
- b) 55% youth who are between the ages of 18 and 36; and
- c) 2% on persons with disabilities.

4.4.4.2.2 Specific provisions pertaining to SANS 1914-5

4.4.4.2.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

4.4.4.2.2.2 Contract participation goals

4.4.4.2.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.

4.4.4.2.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

4.4.4.2.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

4.4.4.2.2.2.4 Variations to SANS 1914-5

4.4.4.2.2.2.4.1 The definition for net amount shall be amended as follows:

Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

4.4.4.2.2.4.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

4.4.4.2.2.5 Training of targeted labour

4.4.4.2.2.5.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.

4.4.4.2.2.5.2 The cost of the formal training of targeted labour, will be funded by the provincial office of the Department of Labour. This training should take place as close to the project site as practically possible. The contractor, must access this training by informing the relevant provincial office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The employer must be furnished with a copy of this request.

4.4.4.2.2.5.3 A copy of this training request made by the contractor to the DOL provincial office must also be faxed to the EPWP Training Director in the Department of Public Works, Fax Number 012 328 6820 or email cinderella.makunike@dpw.gov.za Tel: 083 677 4026.

4.4.4.2.2.5.4 The contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and a minimum of ten (10) days if he she is employed for 4 months or more.

4.4.4.2.2.5.5 The contractor shall do nothing to dissuade targeted labour from participating in training programmes.

4.2.2.5.4 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 4.4.4.2.2.5.4 above.

4.4.4.2.2.5.5 Proof of compliance with the requirements of 4.4.4.2.2.5.2 to 4.4.4.2.2.5.6 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

4.4.4.3.1 Contractor's default in payment to Labourers and Employees

(a) Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene.

(b) The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.

4.4.4.3.2 Provision of Handtools

(a) The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions

4.4.4.3.3 Reporting

The Contractor shall submit monthly returns/reports as specified below:

- (a) Signed Muster rolls/pay sheets of temporary workers (separate) and permanent staff detailing the number, category, gender, rate of pay and signed daily attendance register.
- (b) Copies of certified identity documents of workers
- (c) Number of persons who have attended training including nature and duration of training provided (training attendance register)
- (d) Assets created, rehabilitated or maintained in accordance with indicators in the EPWP M&E framework.
- (e) Plant utilization returns
- (f) Progress report detailing production output compared to the programme of works

4.4.5. GENERIC LABOUR-INTENSIVE SPECIFICATION

The Generic Labour-intensive specification below is the same as SANS 1921-5, Construction and management requirement for works contracts- Part 5: Earthworks activities which are to be performed by hand and should be included in the scope of works without amendment or modification as set out below.

4.4.5.1. Scope

This specification establishes general requirements for activities which are to be executed

by hand involving the following:

- a) trenches having a depth of less than 1.5 metres
- b) stormwater drainage
- c) low-volume roads and sidewalks

4.4.5.2 Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

4.4.5.3 Hand excavatable material

Hand excavatable material is material:

a) granular materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) cohesive materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note:

1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.

2) A dynamic cone penetrometer is an instrument used to measure the insitu shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle

of 60° with respect to the horizontal) into the material being used.

Table 3: Consistency of materials when profiled

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation.	Stiff	Can be indented by thumbnail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumbnail with difficulty; slight indentation produced by blow of a geological pick point.

4.4.5.4. Trench excavation

All hand excavatable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

4.4.5.5. Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers

- a) to 90% Proctor density;
- b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
- c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

4.4.5.6. Excavation

All hand excavatable material including topsoil classified as hand excavatable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

4.4.5.7. Clearing and grubbing

Grass and small bushes shall be cleared by hand.

4.4.5.8. Shaping

All shaping shall be undertaken by hand.

4.4.5.9. Loading

All loading shall be done by hand, regardless of the method of haulage.

4.4.5.10. Haul

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150 m.

4.4.5.11. Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilized for haulage

4.4.5.12. Spreading

All material shall be spread by hand.

4.4.5.13. Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved.

4.4.5.14. Grassing

All grassing shall be undertaken by sprigging, sodding, or seeding by hand.

4.4.5.15. Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must to be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

4.4.5.16. Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition, the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand hold on them.

4.4.6 Plant and equipment

Add Subclause 4.4.5: Restriction on the use of plant.

“Except for the type of plant, and to the extent permitted in terms of the project specification or approved by the Engineer, in writing, the Contractor shall use only hand tools and equipment in the construction of the Works, or portion(s) of the Works, that are required in terms of the project specification to be constructed using labour intensive methods.

Failure by the Contractor to adhere to this clause will put him in breach of contract. The provisions contained in this contract with regard to labour content and labour-intensive construction, are binding, and will be enforced accordingly.”

The plant and equipment used on the site shall not be inferior to that described in the Schedule of Plant and Equipment.



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C4.5 Management

4.5.1 Applicable SANS 1921 standards

The following parts of SANS 1921 Construction works standards and associated specification data are applicable to the works:

- 1) SANS 1921-1:2004
- 2) SANS 1921-2:2004
- 3) SANS 1921-5:2004
- 4) SANS 1921-6:2004
- 5) SANS 1123
- 6) SANS 135
- 7) SANS 136
- 8) SANS 763
- 9) DIN 931
- 10) DIN933

The abovementioned South African National Standards make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

The associated Specification Data is as follows:

SANS 1921-1, Construction and management requirements for works contracts – Part 1: General engineering and construction works	
Clause	Specification data
Essential data	
4.1.7	There are no requirements for drawings, information and calculations for which the contractor is responsible
4.2.1	The responsibility strategy assigned to the contractor for the works is A.
4.3.1	The planning, programme and method statements are to comply with the following: <ul style="list-style-type: none"> • format of programme, • critical path activities and their dependencies, • frequency of updating,
4.3.3	The notice period for inspection is 5 Days
4.7.3	The over break allowances for blasting are provided for in the scope of work.
4.9.3	The trees and shrubs which are not to be disturbed are identified in the scope of work.
4.12.2	The samples of materials, workmanship and finishes that the contractor is to provide and deliver to the employer are: <ol style="list-style-type: none"> 1) concrete works 2) pressure testing results done.
4.14.3	The office accommodation, equipment, accommodation for site meetings and other facilities for use by the employer and his agents are: <ol style="list-style-type: none"> 1) Site office which shall be used for site meetings and for the contractor's use. Such an office shall comprise a minimum of 20m² in area and 3 m high, be ventilated, have good lamination, must be reasonably sound proof, and have a hard floor construction. It shall be furnished with a desk on which drawings can be rolled open and on which there is sufficient writing space and sufficient temporary chairs or benches to accommodate all persons present at site meetings.
4.14.5	The Contractor is required to provide latrine and ablution facilities.
4.14.6	The requirements for the provision and erection of separate sign boards for consultants and subcontractors are: <ol style="list-style-type: none"> 1) The boards must comply with the official standard type signboard of the Employer and be at least 2750 x 1800 mm high. 2) The boards must be constructed with a firm flat exposed face using suitable material of firm construction, painted and lettered according to the standard drawings available from the Employer on request and mounted on sturdy pipe-standards at a height of 1800 mm above natural ground level.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are: <ol style="list-style-type: none"> 1) Water 2) Electricity 3) Sanitation
4.17.3	Services which are known to exist on the site are: <ol style="list-style-type: none"> 1) Water 2) Sanitation

Additional clauses**1 Site meetings and procedures**

The Employer's Representative and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Employer's Representative require their attendance at such meetings.

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contract working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.

2 Water

The Contractor is to provide, and remove and make good upon completion, all the necessary temporary plumbing connections and purchase water from the local authority for the works at his own cost.

3 Electricity

The Contractor is to provide, and remove and make good upon completion, all the necessary temporary electrical connections and installations and purchase electricity from the local authority / Eskom for the works at his own cost.

4.5.2 Particular / generic specifications

The management of the site shall be in accordance with the provisions of the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition), obtainable from the South African Institution of Civil Engineering.

4.5.3 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such book shall be handed to the employer's representative for his signature no later than 12 days after rain that is considered to justify an extension of time occurs.

4.5.4 Unauthorised persons

The Contractor shall keep unauthorized persons from the works at all times. Under no circumstances may any person except guards be allowed to sleep on the building site.

4.5.5 Management meetings

Site meetings will be held on monthly basis. The following parties are required to attend these meetings: the Employer's Representative, the Engineer and/or Representative, the Contractor and/or Representative, the Community Liaison Officer, the Health and Safety Officer and all members of the Project Steering Committee.

4.5.6 Forms for contract administration

These forms will be issued to the Contractor as required.

4.5.7 Electronic payments

Proof of all electronic payments must on request be supplied to the Employer.

4.5.8 Daily records

All accidents and incidents shall be recorded daily in a site diary. Apart from the site diary the Contractor shall provide a site instruction notebook for use by the Engineer. The notebook shall be signed by both the Engineer and the Contractor whenever a site instruction is issued by the Engineer.

The Contractor must ensure daily attendance register by temporary workers is signed

4.5.9 Payment certificates

Contractor to submit claims for the work done. All claims are subjected to verification by the Engineer.

Contractor must ensure that to submit the following documents when submitting the claim for work done to be verified by the Engineer:

- EPWPRS-Data tool template obtained from the Capricorn District Municipality
- Signed temporary contracts for all temporary workers on site
- Certified ID copies for all temporary workers
- Signed daily attendance registers by all temporary workers
- Signed monthly payment register by all temporary workers

4.5.10 Permits

Contractor to ensure that no unauthorised persons are permitted to site

4.5.11 Proof of compliance with the law

Contractor to submit copies of the CIDB Registration and the Company Registration Certificates

4.5.12 Liaison with service providers

The Contractor will have to liaise with Service Providers regarding the following matters:

- a) Dealing with traffic
- b) Locating of existing underground services
- c) Protection of existing services during construction
- d) Access to properties
- e) Incident control on contracts

It is the Contractor's onus to immediately contact all the authorities related to the above and to accommodate their involvement in his programme of works. The Contractor should also warn the authorities at least 48hours before the actual work commences. Compensation for delays, losses or accidents will not be considered should the Contractor at any time have failed to keep the local authorities informed. The Engineer or Employer must immediately be notified, should the Contractor experience any problem regarding work which involves a local authority.

In all dealings with communities through which the works are to be constructed, and in all dealings with workers employed from within such communities, the Contractor shall take due cognisance of the character, culture, and circumstances of the specific community.

4.5.13 Concurrent Construction Contracts

The Contractor's attention is drawn to the fact that other contiguous works may be executed concurrently by Independent Contractors under separate contracts in the vicinity of this works project site.

The other works which maybe in progress or may come into operation on or adjacent to the Site of works during the progress or tenancy of this Contract are likely to include the construction and installation of bulk pipelines.

The Contractor shall ensure that neither his operations nor those of his subcontractors nor the activities of his employees shall interfere with or hinder the operations of the Employer or of other Contractors and he shall indemnify the Employer against all claims arising through default of this requirement.

The Contractor shall handover portions of the Site of Works (whether completed or not), or completion portions of the Works, to these Contractor when required by the Employer or detailed elsewhere in this document. The Contractor shall cause no interference with or delays in the execution of these contiguous Contracts.

No discount or commission for the Contractor is allowed on these Contracts, and it will be assumed that he has fully allowed in the Contract price for the presents of these Contractors onsite. Any service rendered or assistance given by the Contractor to these Contractors, save as are provided for in the project specifications, shall be their accounts only since the Employer shall in no way be responsible to the Contractor for any payments in this respect.

The Contractor shall protect all know existing services as well as all work being carried out and structures being erected on the site by other Contractors. Any damage caused to these services or structures, or any obstruction or hindrance caused to other Contractors by the Contractor, and all claims arising there from, will be the sole responsibility of the Contractor.

All repair work shall be carried out at the Contractor's expense to the entire satisfaction of the Engineer. The same obligations shall be imposed by the Employer on other Contractors in respect of the Works being executed under this Contract.



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C5. Project Specification

SCOPE

This project specification is set out in two parts. Portion 1 cover a general description of the project, the facilities available, and the requirements to be met. Portion 2 covers variations and additions to standardised or particular specifications that are applicable to the contract.

The numbering method in portion 2 of this project specification deviates as follows from the method suggested in Code of Practice SABS 1200.

Each clause with the prefix PS shall refer to the congruent clause in the appropriate section of the standardised or particular specification. Such clause shall either substitute, or supplement, or amend the clause with the same number. Where there is no such congruent clause in the standardised or particular specification, the PS clause shall be a new clause in the project specification. Any clause that is referred to in the standardised specification will also include the appropriate project specification

PROJECT SPECIFICATION

PORTION 1: THE WORKS

PS 1 GENERAL DESCRIPTION OF WORKS

This contract entails the construction of the following:

- Construction 5MI Concrete Reservoir
- Construction of access road
- Construction of Guard House
- Electrical works and telemetry

Tenderers must note that certain rates in this tender are fixed and based on prices that the successful Tenderer shall undertake the complete construction of such installations. Tenderers are also to take note of the fact that the bulk of the work is to be executed by means of labour-intensive construction (LIC) methods, where feasible. The execution of the work will be done using the two following methods:

- (i) Established contractor to employ people from the communities where the work is to be done.
- (ii) Nominated emerging sub-contractors, which are to be employed and trained by the established contractor with the assistance of an approved training institution.

The tenderers must take note of the fact that it will be expected of the successful Tenderer to enter into a formal agreement with the Nominated Emerging Contractors (NEC) and all local labour to be employed on the project. The established/main contractor (MC) will be responsible for the quantity and progress of the work of the nominated emerging contractors.

The work to be carried out during the contract period may be given as separate tasks. Each task to be undertaken will be issued as a written instruction by the Engineer and will consist of a detail scope of work and relevant drawings for each particular task.

PS 2 DESCRIPTION OF THE SITE AND ACCESS

Refer to the “PART C.6 Site Information”.

PS 3 DOCUMENTATION

PS 3.1 The Provisional Bill of Quantities is included in this document and *must be completed and handed in with the tender*.

PS 3.2 The drawings, for tender purposes, listed under part C3.2 are applicable to this contract

PS 3.3 The Tenderer shall check the Bills of Quantities for missing or duplicated pages or drawings and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent or meaning of any particulars or description, or this Bills of Quantities contain any obvious errors, the Tenderer shall notify the Engineer at once who shall promptly give a written directive. No liability whatsoever will be admitted in respect of errors in any tender due to the abovementioned causes.

No alteration, erasure, omission or addition is to be made in the text and conditions of these Bills of Quantities or other documents. Should any such alterations, amendment, note or addition is made, it will not be recognised and the text of the Bills

of Quantities or other documents as prepared by the Representative must be adhered to.

PS 3.4 The Tenderer shall examine all documents and shall thoroughly acquaint himself with the nature and extent of the Works and the manner in which they are to be executed as no claim for extra payment in this connection will be entertained.

PS 4 NATURE OF GROUND AND SUBSOIL CONDITIONS ON SITE

No bore tests or investigation of the in-situ material were done.

The water table may be relatively high during the summer months and provision must be made for effective draining of excavations.

It is the Contractor's responsibility to supply and deliver all material that complies with the minimum standards as well as for the building and maintaining of access roads to the works on site, haul areas or dumping sites. No additional payment will be applicable to the above-mentioned, other than the relevant items in the schedule of quantities.

No trial holes were dug along the network layout. Note that the prospective tenderers shall acquaint themselves with the nature of materials on site.

PS 5 DETAILS OF THE CONTRACT

PS 5.1 MAIN CONTRACT

Work included in this contract involves the scope of work as per paragraph PS1.

The other main components of the work under this contract are:

- a) Establishment of the Contractor's camp
- b) Setting out of the works
- c) Site clearance and earthworks
- d) Construction of 5MI Concrete Reservoir with 2 inlets (with 2 bulk water meters), 400mm diameter and 450mm diameter and the discharge, 400mm diameter (with 1 bulk meter)
- e) Construction of access road
- f) Construction of Guard House
- g) Electrical works and telemetry
- h) Commissioning of the works
- i) Maintenance/Defects liability on the works for a twelve-month period

PS 6 CONSTRUCTION PROGRAM AND METHODS

The construction site is situated in a built-up area; the Contractor shall ensure the least possible disruption of movement of the public during construction.

Construction methods must be of such a nature that no property or life is endangered. The Employer accepts no responsibility for work that is done without consent by the Engineer outside the site boundaries. The Contractor himself is responsible for liaison and arrangements with the Local Authority in connection with the finalisation and approval of the construction program.

The Contractor is responsible for liaison and the necessary arrangements with the relevant road authorities in respect of the finalisation and approval of the works programme.

Sufficient photos of existing structures, walls, and areas that have to be crossed must be taken by the Contractor and handed over to the Engineer before such operations

commence. No payment will be made in this regard and it shall be deemed to be covered in the Preliminary and General items.

Local labourers must do the trench preparation, bedding, handling, laying and backfilling of pipes and fittings. The contractor is responsible to liaise with the Labour Desk for labourers.

No separate payment shall be made for any arrangements with relative local authorities for closing off the current water supply or for the distribution of notices to the public.

The compilation of the construction programme and any amendments thereto during the course of construction shall be at the cost of the Contractor and shall not be measured elsewhere in this contract. The contract has to be completed within the time specified in the "Contract Data" of this document, excluding the builder and public holidays.

PS 7 SITE FACILITIES AVAILABLE

PS 7.1 SOURCES OF WATER SUPPLY, POWER SUPPLY, SANITATION, AND COMMUNICATION

Water for construction purposes will be for the account of the contractor at the ruling tariff and will be supplied at a suitable point, from where the contractor will be responsible to convey the water to the point of usage. Water for human consumption will from the existing network at the ruling tariff. Electrical power is available from the existing reticulation at ruling tariffs. The Contractor shall make his own arrangement for any water or power he may require. Any extension of time due to delays resulting from these facilities will not be granted.

The Contractor must supply and maintain at his own cost a sufficient number of portable chemical toilets, one of which must be situated at the campsite and the rest in the area of the site.

No waste or sludge must be left uncovered until it is removed. The contractor must operate an efficient solid waste removal system to the satisfaction of the engineer for the duration of the contract.

The Contractor must make his own arrangement for communication and a telephone service.

PS 7.2 LOCATION OF CAMP AND DEPOT

A site for the Contractor's camp and depot will be pointed out during the site inspection. No trees may be removed and the Contractor must provide his own firewood.

PS 7.3 HOUSING FOR CONTRACTOR'S EMPLOYEES

No housing is available for the Contractor's employees, and the Contractor shall make his own arrangements for housing his employees or transporting them to and from the site. The Contractor is in all 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.

PS 8 SITE FACILITIES REQUIRED

Housing is required for the Engineer. Other facilities such as an office, telephone, name board, survey equipment, etc. required for the Engineer, are described under the relevant sections.

PS 9 FEATURES REQUIRING SPECIAL ATTENTION

PS 9.1 CONTROL OF WATER

The Contractor is in all respects responsible for the handling of storm water from higher-laying areas, adjacent to the works for the handling of possible sub-surface water and for the handling of spoiled water when disconnecting existing connections or valves. No separate payment shall be made for this, as all costs related thereto shall be deemed to be included elsewhere in the tendered rates.

PS 9.2 "AS BUILT" DRAWINGS

As the work progresses, the Contractor shall keep full records of all amendments to and deviations from the drawings as issued to the Contractor at the start of the contract. The true positions, invert levels and ground levels of all services shall be indicated on the drawings, for which purpose the Contractor shall receive a separate complete set of drawings from the Engineer, at no cost.

The completion certificate shall only be issued after the Engineer has received a properly completed set of "**AS-BUILT**" drawings from the Contractor. No separate payment shall be made for this service, as all costs related thereto shall be deemed to be included in the related items.

PS 9.3 FINISHING AND TIDYING

Progressive and systematic finishing and tidying will form an essential part of this contract. Under no circumstances shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate unnecessarily and in the event of this occurring the Engineer shall have the right to withhold payment for as long as necessary in respect of the relevant works in the area(s) concerned.

PS 9.4 SURVEY BEACONS

No setting out of the pipeline route was done. All proposed pipelines shall be parallel (at least 2,5 m away) to the existing yard boundaries. No separate payment shall be made for this, as all costs related thereto shall be deemed to be included elsewhere in the tendered rates.

PS 9.5 CONSTRUCTION MODUS OPERANDI

Labour-based or labour-intensive construction may be defined as the economically efficient employment of as much labour as is technically feasible to produce as high a standard of construction as demanded by the specification and allowed by the funding available. In other words, projects based on labour-intensive principles aim at devoting the highest feasible proportion of projects costs to unskilled, semi-skilled and skilled labour without jeopardising the technical quality of the product demanded by the specification.

The following regulations must be adhered to so as to ensure that the construction methods used are labour intensive.

- i) The remuneration to local labour for hourly-rated employees and/or daily-based work shall be in accordance with the terms and conditions of Proclamation R1841 of Government Gazette 16833 dated 24 November 1995 or its latest amendment.
- ii) The name, identification number, task performed, and hours worked per day for each labourer shall be recorded by the Contractor. These records shall be submitted to the secretary of the Project Steering Committee on the second working day of each week following the recounted week.

The local labour must be divided as follows:

Percentage of labour	Description
60%	Women
55%	Youth (Above school, 35yrs and below)
2%	Disabled persons

PS 9.6 LOCALLY BASED SUB-CONTRACTORS

Tenderers are encouraged to utilise the services of locally based sub-contractors.

PS 10 TRAINING

PS 10.1 General

A suitably capable Training consultant is to be employed on this project.

Their duty is to identify suitable persons and train them for the following:

- i) Employee Training – community-based labour
- ii) Employer Training – community-based contractors
- iii) Committee Training – maintenance and operation of the Works (this however falls outside the scope of this Contract)

This project is a project using community-based labour and community-based contractors as far as possible.

The Contractor using the necessary plant and labour as he sees fit shall carry out conventional construction. However, the Contractor may only bring in key staff from outside the area that has the necessary skills not available among the local community. Other than key staff, all other labour must be employed from the local communities. As a guideline, key staff would include general foreman, foreman, site managers, buyers, quantity surveyors, etc.

The Training Consultant will provide the necessary training so that the local labourers will have the necessary skills to carry out this work. In this respect, the contractor and the Training Consultant will have to work closely together to identify what skills are required, how many labourers in each trade are required and when this labour will be required, so that the necessary training can be given timeously.

Typical training that is envisaged at this stage includes shuttering, concrete work, reinforcing, team leaders, etc.

The other part of the Contract is work that will be carried out by community-based contractors.

The Training Consultant will identify persons, with the assistance of the Project Steering Committee, and train these persons to establish small community based contracting firms, who will employ local labour. These firms will tender to carry out this work and successful Tenderers will be appointed by the Contractor as nominated sub-contractors to execute this work.

Typical training that will be given by the Training Consultant is:

- i) Community based contractors
 - Preparation phase – using a calculator, numeracy, using a scale ruler, reading a building plan, handling administrative tasks in the building industry.
 - Estimating and tendering – marketing the services of a company, seeking, selecting, collecting and studying tender documents, investigating and

assessing a site, developing a bill of quantities from building plants, calculating the cost of a project, finalizing tender prices, completing and submitting a tender.

- Project planning – introducing to planning techniques, pre-tender planning, planning contract activities, contract planning, executing a contract programme.
- Executing the project – managing the finances of the company, managing materials, administering record systems, managing manpower, completion and handover.

ii) Community based labour

Local labour will be taught the following skills:

- Excavation if possible, bedding, selected backfill and backfill
- Pipe laying, valves and fittings
- Valve boxes, manholes, anchor blocks etc.

Again the Contractor and Training Consultant will have to work closely together to identify what their requirements are and when this labour is needed.

Community based labour training will take place on site before actual production starts. No allowance needs to be made for wages, food or travelling during training.

Training of community-based contractors will take place at a central point. The Provincial Sum allowed in the Schedule of Quantities, makes allowance for travelling and meals for the training of community-based contractors.

PS 10.2 Construction and Materials Management

This section applies only to work to be carried out by community-based contractors.

The contractor shall provide construction and material management to the community-based contractors. In this respect, each party has the following responsibilities.

i) Community Based Contractors

- To tender on the labour-based sub contract work and enter into a contract with the Contractor.
- To carry out the work according to specification and on time using community-based labour.
- To liaise and co-operate with the contractor regarding specifications, programme, progress, delivery of material, quality of work etc.
- To provide wheelbarrows, hand tools, clothing, safety equipment, etc. to enable his labourers to carry out the work. All material (pipes, fittings, valves, etc.) to be provided by the Contractor.
- To receive material required for the task, store it and provide the necessary security until the material is built into the works.
- To provide the necessary transport for this labour force.
- To carry out a task in its entirety until final approval and acceptance. In other words, there will be no split responsibility. For example, a community-based contractor will excavate, provide the bedding, selected backfill, backfill, lay pipes, valves and fittings, build valve boxes, manholes, anchor blocks etc. and test the pipes in conjunction with the Contractor.
- To pay his labourers. VAT etc. and finalize the final account.

ii) Contractor

- In conjunction with the Training Consultant, establish the needs, training and programming of the work.
- To assist the Training Consultant in drawing up the agreements of association between the Contractor and the community-based contractors where applicable.

- To enter into nominated sub contracts with the community-based contractors.
- To provide the necessary skills transfer and construction management for the community-based contractors to successfully complete this work. This includes setting out of the work, quality control over the work, programming of the work, progress, testing and acceptance thereof.
- To provide the necessary materials to execute the work. This includes purchasing the required materials, transporting them to the camp site, storage at the campsite, transporting of materials as required from camp site to the sites of the various community-based contractors, handing over of the materials.
- To pay the community-based contractors as the work progresses and the Contractor must make allowance in his Tender for this. Retention monies will be as for this Contract. No sureties will be required from the community-based contractors.
- To measure the work and finalize the final account.
- Complete copies of the emerging contractor's contracts to be given to the Engineer for endorsement prior to the contract being signed.

Candidate selection would be according to the requirements for a particular discipline. A Certificate of Achievement should be awarded to a student who has attained a prescribed level of competency.

A provisional amount for training has been recorded in both sections under the Item "Training", in the Preliminary and General portions in the Schedule of Quantities.

PS 11 APPLICABLE STANDARDISED SPECIFICATIONS

Although not bound in nor issued with this document, the following standardised specifications shall form part of the contract and, notwithstanding the provisions of sub clause 2.2 of SABS 1200 A, the editions specified below shall apply:

SABS 1200 A	-	1986	General
SABS 1200 AB	-	1986	Engineers Office
SABS 1200 C	-	1986	Site Clearance
SABS 1200 D	-	1988	Earthworks
SABS 1200 DA	-	1988	Earthworks (Small Works)
SABS 1200 DB	-	1989	Earthworks (Pipe Trenches)
SABS 1200 G	-	1982	Concrete (Structural)
SABS 1200 GA	-	1982	Concrete (Small Works)
SABS 1200 HA	-	1990	Structural Steelwork (Sundry Items)
SABS 1200 L	-	1983	Medium Pressure Pipelines
SABS 1200 LB	-	1983	Bedding (Pipes)
SABS 1200HC	-	1983	Corrosion Protection
SABS 1200LC	-	1983	Cable Ducts

The newest additions of above specifications up to and including the month of this tender will prevail.

PROJECT SPECIFICATION
PORTION 2: VARIATIONS AND ADDITIONS TO
STANDARDISED SPECIFICATIONS

SABS 1200 A: GENERAL

A 3 MATERIALS

PS A 3.1 QUALITY

Substitute the second sentence of the first paragraph of A 3.1 with the following:

Materials shall bear the official mark of the appropriate standard.

Substitute the second paragraph with the following:

The Contractor is responsible for the cost of all testing to ascertain that the materials do comply with the relevant minimum requirements and all such costs shall be deemed to be included in the tendered rates. The cost of control tests done by the Engineer and of which the results do not comply with the minimum requirements shall be for the Contractor's account.

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

The handling, storage, transport, and erection of equipment, machinery, and materials shall be strictly in accordance with the requirements of the supplier and/or manufacturer.

All materials shall be new and of the best quality available unless otherwise specified. They must function satisfactorily under prevailing climate and weather conditions at the place of installations.

A 4 PLANT

PS A 4.2 Contractor's Offices, Stores and Resources

Add the following to A 4.2:

No housing is available for the contractor's employees and the contractor must make his own arrangements for accommodation and transport of his employees.

PS A 4.3 Hand Tools

The contractor shall provide and maintain all hand tools required for the execution of the Works.

A 5 CONSTRUCTION

A 5.1 SURVEY

PS A 5.1.1 Setting Out Of The Works

Substitute the first sentence in A 5.1.1 with the following:

Setting out of the works is the sole responsibility of the Contractor and shall be done from the layouts given to him. The proposed network pipes must be placed 2,0m away from the erf boundaries in the road reserve. Any discrepancy shall immediately be reported in writing to the Engineer. Any costs or subsequent costs arising from

discrepancies, which had not been reported to the Engineer, shall be the sole responsibility of the Contractor. *The exact position of the network pipes shall be determined on site in conjunction with the Engineer and must be approved before construction of the specific section starts.*

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

PS A 5.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS

Add the following to A 5.2:

The crossing of existing tar and dirt roads must be done in half widths, while the total traffic is accommodated on the other lane.

Road traffic signs shall comply with the requirements of the "South African Road Traffic Signs Manual" and shall be approved by the Engineer before construction commences.

A 7 TESTING

PS A 7.4 STATISTICAL ANALYSIS OF CONTROL TESTS

Substitute A 7.4 with the following:

Test results shall not be evaluated by statistical methods. All results shall comply with the specified minimum requirements of the materials concerned.

A 8 MEASUREMENT AND PAYMENT

A 8.2 PAYMENT

PS A 8.2.1 Fixed-Charge and Value-Related Items

The tendered amounts for fixed-charge and value-related items will not be increased, if extension of time for the completion of the works is awarded.

PS A 8.2.2 Time-Related Items

The tendered amount for a time-related item will be increased; if an extension of time for the completion of the works is awarded on the condition that the activity related to the item tendered for must be sustained during the extended period.

The ratio between the increased amount for a time-related item and the tendered amount must be the same as the ratio between the extension of the time period for the completion of the works and the original time period allowed for completion of the works.

If the works is completed before the end of the original time period allowed for completion of the works, the tendered amount of a time related item that is influenced by the earlier completion would be reduced similarly.

A 8.3 SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS

PS A 8.3.3 Other Fixed-Charge Obligations

This item as listed under Schedule A of the bill of quantities is as specified in the standardised specification SABS 1200 A.

A 8.4 SCHEDULED TIME RELATED ITEMS

PS A 8.4.5 Testing.....

Unit : Sum

The cost of all sampling and testing executed by the Contractor or approved laboratory must be included in the amount for other time related items and no separate payment shall be made for this. This condition also relates to the placing, curing and testing of concrete cubes.

A 8.5 SUMS STATED PROVISIONALLY BY ENGINEER

PS A 8.5(a) 1 Community Liaison Officer.....

Unit : Sum

The Contractor must pay a salary to a person appointed as the Community Liaison Officer for the project. The amount of payment and payment dates will be determined as soon as the Community Liaison Officer is appointed.

PS A 8.5(a) 2 Overheads, charges and profit on (1) above.....

Unit : %

Handling cost and profit in respect of sub-item 8.5(a)1. A percentage of the payment made to the Community Liaison Officer will be paid to the contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the Community Liaison Officer. No payment will be made under this item before payment to the Community Liaison Officer.

PS A 8.5(b) 1 Training..... Unit

: Sum

Provisional sum for training services supplied by the Training Company. The name and contact details of the Training Company, to be appointed by the Contractor, will be supplied to the Contractor by the Employer or Engineer.

PS A 8.5(b) 2 Overheads, charges and profit on (1) above..... Unit

: %

Handling cost and profit in respect of sub-item 8.5(b)1. A percentage of the payment made to the Training Company will be paid to the Contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the Training Company. No payment will be made under this item before any payment is made to the Training Company.

PS A 8.5(c) 1 Occupational, Health and Safety ActUnit :

Prov. Sum

Provisional sum for the supply of all safety equipment, safety clothing, first aid kit, etc. in order to adhere to the Occupational, Health and Safety Act specifications. The Contractor must familiarise himself with the conditions as per Occupational, Health and Safety Act and adhere thereto. The rate shall cover the contractor's overheads, changes, and profit on payments for the Service Provider.

PS A 8.5(c) 2 Overheads, charges and profit on (1) above.....Unit :

%

Handling cost in respect of sub-item 8.5(c)1. A percentage of the payment made to the Service Provider will be paid to the Contractor. The rate shall cover the contractor's overheads, changes, and profit on payments for the Service Provider.

PS A 8.7 DAYWORK

Replace A 8.7 with the following:

Daywork will be paid according to the percentage allowance method. For calculating the total remuneration the General Conditions of Contract for Construction Works, Second Edition (2010) shall apply, with the amendments as in the appropriate special conditions of contract, which is bound into this document. A daywork schedule will be provided for filling in the necessary information.

A 8.8 TEMPORARY WORKS

**PS A 8.8.2 Accommodation Of Traffic Unit
: Sum**

Add the following to A 8.8.2:

The rate shall cover all costs pertaining to the provision, erection, moving, re-erection and maintenance of all temporary barricades, road signs, lights, flagmen, etc. as required, for the guarding and protection of the works, for the construction, gravelling and maintenance of access roads and detours to the site of the works, borrow pits or spoil sites, as well as for the later removal or the cleaning and tidying up thereof.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 AB: ENGINEER'S OFFICE

AB 3 MATERIALS

PS AB 3.1 NAME BOARDS

Substitute "South African Institution of Civil Engineers" in the first paragraph of AB 3.1 with "South African Association of Consulting Engineers".

PS AB 3.2 OFFICE BUILDING

Replace AB 3.2 with the following:

Prior to commencing with work, the contractor shall provide and furnish for the use of the engineer's representative and his staff one office (3.0 x 4.5m Wendy House Type with veranda) in an approved position. The Engineer will indicate the position. All plans shall be submitted to the engineer for approval, before the commencement of erection.

The office with a minimum floor area of 13.50m² (the smaller dimension at least 3.0m) with a ceiling height of minimum 2.1m, shall also have one toilet apart from the office building for the exclusive use of the engineer's representative.

The office shall be provided with lined walls and boarded ceilings and floor and suitable door with secure locks. The office shall be ventilated, weather proof and waterproof and shall have windows with an area to at least 20% of the floor area. The office shall be insulated to provide comfortable working conditions.

Internal furnishings shall include:

- One desk (1,5m long x 1,0m wide x 0,9m high) with lockable drawers with keys
- One drawing table
- Eight desk chairs
- One table (2,0m long x 1,0m wide x 0,9m high) with smooth top.

AB 4 PLANT

PS AB 4.1 TELEPHONE AND FAX

Replace AB 4.1 with the following:

The Contractor shall supply the Engineer with a cellular telephone service for the exclusive use of the Engineer and Engineers Representative for official purposes for the duration of the contract.

AB 5 CONSTRUCTION

PS AB 5.1 NAME BOARDS

Add the following to AB 5.1:

The name boards including EPWP logo as per EPWP guideline shall be erected within a month of the commencement date of the contract and shall be placed at the position indicated by the Engineer. Any damage to these boards shall be

repaired within seven days of a written instruction issued by the Engineer. No payment shall be made in terms of the contract prior to the erection of the name boards.

The Contractor will be permitted to erect a maximum of two of his own name boards, in positions approved by the Engineer. The Engineer reserves the right to order the removal of these boards if they are not kept in good repair.

PS AB 5.5 SURVEY ASSISTANTS

Substitute "two or more suitably educated survey labourers" in the first sentence of PS 5.5 with "two semi-skilled labourers."

PS AB 5.6 SURVEY EQUIPMENT

The Contractor shall provide the following tested and approved survey equipment on site for the duration of the contract and for the use of the Engineer whenever needed:

- a) One tachometer capable of reading to minimum 20 seconds and maximum 6 seconds of arc, plus tripod;
- b) One automatic level plus tripod;
- c) Two tachometer staffs and one level staff, all graduated metrically;
- d) One 5m and one 100 m tape measure; and
- e) Diverse surveyors' necessities like paint, pegs, etc.

The above-mentioned equipment may by arrangement be shared between the Contractor and the Engineer's representative.

The Contractor shall keep the equipment continuously insured against any loss, damage, or breakage, and he shall indemnify the Engineer and the Employer against any claims in this regard.

The Contractor shall maintain the equipment in good working order and keep it clean throughout the contract period.

AB 8 MEASUREMENT AND PAYMENT

AB 8.2 PAYMENT

**PS AB 8.2.2(a) Office buildings.....Unit :
Sum**

The rate shall cover all time-related costs pertaining to the office building as prescribed in PS AB 3.2.

**PS AB 8.2.2(b) Telephone and fax.....Unit :
Sum**

The rate shall cover all time-related costs pertaining to the telephone and fax as prescribed in PS AB 4.1.

**PS AB 8.2.2(c) Name boards (2 off).....Unit :
Sum**

The rate shall cover all time-related costs pertaining to the name board/s as prescribed in PS AB 5.1.

**PS AB 8.2.2(d) Survey assistance and equipment.....Unit :
Sum**

The rate shall cover all time-related costs pertaining to the survey assistants and equipment as prescribed in PS AB 5.6.

PROJECT SPECIFICATION

PORTION 2 : VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 C : SITE CLEARANCE

C 3 MATERIAL

PS C 3.1 DISPOSAL OF MATERIAL

Substitute the first sentence of C 3.1 with the following:

Material obtained from clearing and grubbing shall be disposed of at the site indicated at the site inspection. If such a site is indicated at tender stage, the cost of transporting material and debris will be included under 8.2.1.

Loading and off-loading should be done by hand and the contractor must price accordingly under item 8.2.1.

C 5 CONSTRUCTION

PS C 5.1 AREAS TO BE CLEARED AND GRUBBED

Substitute the first sentence of C 5.1 with the following:

Unless otherwise indicated by the Engineer, clearing and grubbing are limited to a 2,5m wide strip along the pipe route. Measurement and payment for clearing and grubbing shall only occur for areas as required in writing by the Engineer.

The Contractor may proceed with clearing and grubbing after the handing over of the site.

C 5.2 CUTTING OF TREES

C 5.2.3 Preservation Of Trees

PS C 5.2.3.2 Individual trees

Add the following to C 5.2.3.2:

Trees outside pipeline routes must be left standing and undamaged, except where otherwise ordered in writing by the Engineer.

A penalty of **R15 000,00** per tree for trees damaged and/or removed will be charged.

PS C 5.9 EXISTING FENCING

The fencing parallel to the pipeline routes must only be removed and re-erected at the positions as indicated and approved by the Engineer and repaired where it was damaged. When the pipeline routes cross fencing or gates temporary wire gates must be provided that must be kept closed. After completion of the work these fences or gates must be repaired to the same condition as before commencement of the work.

C 8 MEASUREMENT AND PAYMENT

C 8.2 SCHEDULED ITEMS

PS C 8.2.1 Clear and grub (3.0m strip)

Unit : m

The removal of all rocks and boulders on site over 0,15 m³ will be paid under sub clause D 8.3.2(b). The removal of hard rock other than boulders will be paid under sub clause PS DB

PROJECT SPECIFICATION
PORTION 2 : VARIATIONS AND ADDITIONS TO
STANDARDISED SPECIFICATIONS
SABS 1200 D : EARTHWORKS

D 3 MATERIALS

D 3.3 SELECTION
PS D 3.3.1 General

Substitute the second paragraph of D 3.3.1 with the following:

The Contractor shall deal selectively with material from general excavation. Any imported material in road reserves that do not comply with the minimum requirements for the respective layers, shall be removed, and replaced with suitable material, all at the Contractor's expense.

The Contractor shall deal in such a way with materials from all excavations for pipe trenches to ensure that usable material is not contaminated with unsuitable material. If usable material is contaminated, such contaminated material shall be removed and replaced with suitable material, all at the Contractor's expense. No additional payment shall be made in respect of this and all relevant costs shall be deemed to be included in the tendered rates.

All unsuitable material shall be removed prior to importing fill material in such areas.

D 5 CONSTRUCTION

D 5.1 PRECAUTIONS

PS D 5.1.2.1 Barricades and Lighting

The Contractor's attention is drawn to the fact that pipelines must be constructed under access roads. The Contractor must arrange his work in order to assure free flow of traffic. No additional payment for any discomfort, extra costs, or delaying as a result of the provision of this facility will be made except for the items as allowed under PS A 8.8.2.

PS D 5.1.2.2 Detection, location and exposure

Add the following to D 5.1.2.2:

If existing services are not shown on the drawings, but the existence thereof can be reasonably expected, the Contractor shall, in conjunction with all relevant authorities, determine the exact depth and location of such services before the commencement of construction. After locating the exact position of services, whether indicated on the drawings or not, such services shall be deemed to be known services and the Contractor shall be liable for all costs and subsequent costs arising from the damage thereof as a result of the Contractor's activities. These services must also be indicated on the "As Built" drawings.

A minimum of three trial cross trenches per street block must be excavated by hand perpendicular to the pipeline route to establish the position of existing services and the final portion of the network pipeline.

All services must be located and opened for inspection by the Engineer before commencing trench excavation. Any costs or losses suffered by the Contractor as a result of not abiding by this specification will be for the Contractor's account.

PS D 5.1.4.1 Dust nuisance

Add the following to D 5.1.4.1:

The Contractor is responsible for dust control and is liable for all claims that may result from dust nuisance on all parts of the site and at all times from the date of handing over of the site to the completion date of the contract. No payment regarding the above-mentioned will be made and all costs shall be deemed to be covered by the tendered rates.

PS D 5.1.6 Road Traffic Control

Add the following to D 5.1.6:

- a) Sufficient road signs must be erected in such a way that motorists will be warned in time of works, e.g. at the closing of a street sufficient signs to direct traffic must be erected at the preceding intersection.
- b) Bypasses and/or road signs shall be provided and/or erected at all locations where the free flow of traffic is obstructed and shall be approved by the Engineer before the commencement of construction. Where main roads are crossed, detours and temporary traffic signs must be provided as shown on the attached drawings.
- c) Where a trench crosses a street or any place where a trench crosses the direction of traffic flow, drums must be placed in the street and not just along the sides of the street with danger tape in between.
- d) Danger tape must be put up between drums and tied around the drums.
- e) Drums may not be filled with stones. The spacing of drums must be in such a way (maximum 5 m) that they are visible from all directions.
- f) Sufficient safety measures must be utilised for pedestrians.
- g) Vehicular and pedestrian access must be maintained to all stands, businesses, etc at all times.

D 5.2 METHODS AND PROCEDURES

D 5.2.2 EXCAVATION

PS D 5.2.2.2 Borrow Pits

The contractor must construct and maintain at his own cost the necessary access roads and borrow pits. The position of borrow pits must be approved by the Engineer before opening up the borrow pits.

PS D 5.2.2.3 Disposal

Substitute the second sentence of D 5.2.2.3 with the following:

All surplus and unsuitable material shall be dumped and neatly finished off in the area pointed out for this during the site inspection.

PS D 5.2.3.2(b) Backfilling

Add the following to D 5.2.3.2 (b):

The backfilling of excavations along the perimeter of valve chambers, etc to provide workspace for vertical shuttering must be placed in ± 200 mm layers and compacted to 90% Mod. AASHTO with material from the excavation or with material from approved borrow pits. This backfilling is not measured separately but is included in the tariff for the chambers.

D 8 MEASUREMENT AND PAYMENT

D 8.3 SCHEDULED ITEMS

D 8.3.3 Restricted Excavation

The excavation of the valve chamber, stand posts, etc. is not measured separately and is included in the tariffs of the chambers.

PROJECT SPECIFICATIONS

**PORTION 2: VARIATIONS AND ADDITIONS
TO STANDARDISED SPECIFICATIONS**

SABS 1200 G: CONCRETE (STRUCTURAL)

G 3 MATERIALS

PS G 3.1 APPROVAL OF MATERIALS

Substitute “in good time” with “within 14 days of site handover” in the first sentence.

G 3.2 CEMENT

PS G 3.2.1 Portland Cement and Slagment

Substitute G 3.2.1 with the following:

“Where reference is made in this specification or the standard specifications to the cement specifications, e.g. SABS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification:

SABS ENV 197-1: Cement-composition, specifications and conformity criteria.

Part 1: Common cements.

Furthermore, where reference is made in this specification or the standard specifications to the different cement types, the following new names/types shall apply:

Old product nomenclature	Typical new product nomenclature	
	Cement type	Cement strength class
OPC	CEM I	32,5
	CEM I	32,5R
RHC	CEM I	42,5
	CEM I	42,5R
LASRC	No provision made	No provision made
PC15SL	CEM II/A-S	32,5
	CEM II/A-S	32,5R
	CEM II/A-S	42,5
PC15FA	CEM II/A-V	32,5
	CEM II/A-V	32,5R
	CEM II/A-W	32,5
	CEM II/A-W	32,5R
RH15FA	CEM II/A-V	42,5
	CEM II/A-V	42,5R
	CEM II/A-W	42,5
	CEM II/A-W	42,5R
PBFC	CEM III/A	32,5
	CEM III/A	32,5R
PFAC	CEM II/B-V	32,5
	CEM II/B-W	32,5
RH30SL	CEM II/B-S	32,5R
	CEM II/B-S	42,5
RH40SL	CEM III/A	32,5R
	CEM III/A	42,5

CEM I 32,5, CEM II A-S 32,5, CEM II/A-V 32,5, or CEM III A may be used for the manufacture of reinforced concrete members.”

PS G 3.2.3 Storage of cement

Add the following to G 3.2.3:

Cement supplied in bags shall be arranged in such a way that it is used in the order in which is/ was delivered to site. The bags shall be closely stacked to a height not exceeding 12 bags. Bags shall not be stacked against the outside walls. The cement storage facility shall be weatherproof and provided with a damp proof floor, which shall be cover by a heavy-duty plastic sheet. Brand and/or types shall be stored together and not mixed in a stack.

Cement shall not be kept in storage for longer than six weeks from the date of manufacture without the Engineer's permission. If the cement is older than six weeks it may be removed from site by order from the Engineer. Alternatively, the Engineer can alter the mix design for use in concrete or the use thereof in concrete intended for less critical importance, as in blinding layers.

For the estimation of the storage facility, it can be assumed that 20 bags of cement can be stored in one (1) cubic meter with a floor load of 25kN/m².

G 3.4 AGGREGATES

PS G 3.4.1 Applicable Specifications

Add the following to G 3.4.1:

All coarse aggregate (stone) shall be of dolomitic origin.

G4 PLANT

G4.5 FORMWORK

PS G 4.5.2 Finish

Add the following to G 4.5.2:

All horizontal, external corners shall be chamfered by fixing a 25mm x 25mm fillet strips into the corners of the formwork with no additional payment.

PS G 4.5.3 Ties

Add the following to G 4.5.3:

Only patented ties with cut-off collars shall be used on water-retaining structures. All ties will be approved by the Engineer. Tie openings must be plugged with a waterproof mortar like "Sika – 4a Fixing Mortar" or similar approved.

G5 CONSTRUCTION

G 5.1 REINFORCING

PS G 5.1.3 Cover

Add the following to G 5.1.3:

Minimum cover to reinforcement shall be for "severe" conditions, unless otherwise shown on the drawings.

PS G 5.1.4 Splicing

Add the following to G 5.1.4:

Splices shall be staggered.

PS G 5.1.6 Lap length

Add the following sub-clause to G 5.1

The minimum lap length for reinforcement must be 50 diameters or as indicated on the drawings.

G 5.5 CONCRETE

G 5.5.1 Quality

PS G 5.5.1.2 Consistency

Add the following to G 5.5.1.2:

The slump for water retaining concrete shall not be less than 30mm and not more than 60mm.

PS G 5.5.1.5 Durability

Add the following to G5.5.1.5:

Water retaining structures shall be for "severe" conditions.

PS G 5.5.1.7 Strength concretes

Add the following to G 5.5.1.7:

Unless specified differently the grade of concrete to be used shall be as follows:

- i) Grade 35/19: All reinforced concrete for structural foundations, abutments and piers.
- ii) Grade 30/19: All reinforced concrete except structural foundations
- iii) Grade 20/19 : All concrete bedding
- iii) Grade 20/19: Blinding layers
- iv) Grade 20/38: Mass concrete and concrete filling
- v) Grade 20/9,5: Screeds and benching

PS G 5.5.1.8 Mix Proportions

Add the following sub-clause to G 5.5.1:

The minimum cement content should be 350 kg/m³. A maximum water/cement ratio of 0,5 should be used. The cement used should be CEM III Blastfurnace Cement conforming with SABS ENV 197-1. The 28-day characteristic strength should be 35 N/mm². The cement content should not exceed 400 kg/m³.

PS G 5.5.11 Watertight concrete

Add the following sub-clause to G 5.5.11:

All manholes shall be deemed to be water-retaining unless otherwise specified.

PS G 5.5.18 Building in of pipes

Add the following:

The Contractor under this Contract shall be responsible for building-in or caulking and making watertight around all pipes and fittings which pass through walls of structures, irrespective of whether the Contractor himself supplies and installs the pipes and fittings, or the Employer purchases the pipes and fittings and the Contractor under this Contract takes delivery and installs them, or some other contractor (e.g. a plant supplier) supplies and installs the pipes and fittings in recesses or through holes left in the various structures for the reception of such pipes and fittings. In the latter case the Contractor under this Contract will be paid for forming the openings and caulking of these pipes or fittings under the item provided for this purpose in the Schedule of Quantities.

Where pipes or specials are required to pass through or be set into concrete, pipes must be cast into position with the formwork fixed around them. If approved by the engineer, work holes may be left in the concrete.

Before commencing the positioning in holes of any pipes/specials the Contractor shall:

- a) cut the reinforcement to allow the pipe to be installed. Cut reinforcing in centre and bend away;
- b) remove all shuttering and boxing remaining in the holes;
- c) make any alterations required to the position and shape of the holes;
- d) thoroughly clean the sides of the holes so as to obtain a satisfactory bound surface for the new concrete; and
- e) free all surfaces of the pipes/specials of all dirt.

After accurately positioning the pipes/specials in their respective holes, the Contractor shall fix the pipes/specials in the holes.

Immediately before grouting is carried out by the placing of mortar and concrete around the pipes, the surface of the existing concrete shall be saturated with water. All surplus water shall be removed and the surface covered with a layer, approximately 12 mm thick, of mortar consisting of three parts of concrete sand and one part of cement.

The concrete ingredients shall be mixed and placed as dry as possible to obtain a dense, waterproof concrete. Where a watertight seal is required, the concrete shall be carefully worked around the puddle flange, if any, and the pipe barrel or body of the special, and shall be vibrated in layers so as to obviate any falling away from pipe/special surfaces of the concrete already placed. The whole shall, when set, form a dense, homogeneous, and waterproof mass. A spare vibrator with an independent power source shall be kept in readiness to ensure continuity of placing in the event of the breakdown of the duty vibrator.

Smooth formwork that has been suitably strengthened for use with a vibrator shall be provided for facing the concrete around each pipe/special.

G 6.2 DEVIATIONS

Notwithstanding the conditions as set out in sub-clauses 6.2.1 to 6.2.2 the following tolerances shall also apply to this Contract.

PS G 6.3 CONCRETE ELEMENTS

Concrete elements shall be constructed and finished to the following tolerances

- | | | |
|------|--------------------------|--------|
| i) | Surface irregularities | 5 mm |
| ii) | Cross section dimensions | ± 5 mm |
| iii) | Level | ± 5 mm |

G 8 MEASUREMENT AND PAYMENT

PS G 8.1.1 Formwork

Add the following to G 8.1.1.6:

The unit rate shall also cover the cost of ties and patented ties as specified in Clause PS G 4.5.3.

PS G 8.1.2 Reinforcing

Substitute item 8.1.2.2(a) with:

Reinforcing will be paid for per ton for each type (soft, steel or high yield) and size.

Add to item 8.1.2.2(c) the following:

Payment for mesh reinforcing will be for area covered. The unit price must allow for wastage and overlap. Overlap to be at least 300mm.

PROJECT SPECIFICATIONS

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 GA: CONCRETE (SMALL WORKS)

GA 3 MATERIAL

PS GA 3.2.1 Applicable Specifications

Add the following to G 3.2.1:

Portland cement that conforms to SABS 471.

PS GA 3.2.2 Storage Of Cement

Add the following to G 3.2.2:

Consignments of cement shall be used in the same sequence as that in which they are delivered to site. No cement shall be used which has been stored on site for a longer period than 6 (six) weeks. All cement so stored for a longer period than 6 (six) weeks, all cement damaged in any way, and all cement which does not comply with the specification, shall be removed immediately and permanently from the site.

GA 4 PLANT

PS GA 4.4 Formwork

PS GA 4.3.3 Ties

Add the following to G 4.4.3:

No ties will be allowed in vertical walls and permanent metal ties shall have a minimum concrete cover of 40 mm. Tie holes shall be filled with an approved non-shrink epoxy grout.

GA 5 CONSTRUCTION

GA 5.1 REINFORCEMENT

PS GA 5.1.3 Cover

Substitute G 5.1.3 with the following:

The cover of concrete over reinforcement, unless otherwise indicated on the drawings, shall be not less than 40 mm.

GA 5.2 FORMWORK

PS GA 5.2.1 Classification Of Finishes

Add the following to G 5.2.1:

The following surface conditions are required in the various portions of the finished concrete:

- (a) **Rough**

Concealed surfaces and surfaces lower than 100 mm below finished ground level.

(b) **Smooth**

All concrete finishes shall be classified as Smooth unless shown otherwise on the drawings. Imperfections such as small fines, bulges, irregularities, surface honeycombing and unacceptable surface discolorations shall be made good and repaired by approved methods. The finished dimensions shall be to Degree of Accuracy as defined in Clause 6 of SABS 1200 G.

GA 5.4 CONCRETE

GA 5.4.1 Quality

PS GA 5.4.1.2 Consistency

Add the following to sub clause G 5.5.1.2(a):

The slump of concrete used in water retaining structures may not be less than 30mm and not more than 60mm.

PS GA 5.4.1.5 Strength concrete

Add the following to G 5.5.1.7:

The grade of strength concrete and the maximum nominal size of coarse aggregate for each portion of the works, unless otherwise indicated on the drawings, shall be as follows:

(a)	Blinding layers and encasing of pipes	20 MPa/19 mm
(b)	Benching	20 MPa/19 mm
(c)	Screeds	20 MPa/10 mm
(d)	Reinforced concrete	30 MPa/19 mm

PSGA 5.4.1.6 Ready Mix Concrete

The production of concrete at a central production facility shall be permitted, for all cases a design mix shall be submitted for the Engineer's approval

PS GA 5.4.1.7 Durability

Concrete shall be so proportioned to ensure that the water/cement ratio does not exceed 0,5 and, to ensure workability, water-reducing admixtures of approved manufacture shall be used in preference to increasing the cement content.

PS GA 5.4.8 Concrete Surfaces

Add the following to GA 5.4.8.1:

Concrete surfaces under screeds, granolithic finishes or benching shall be brought up to a plane, uniform surface with a suitable screed board.

PS GA 5.4.11 Construction Joints

The use of construction joints must be minimised and may only be placed as shown on the drawings or at positions as approved by the Engineer.

At all construction joints in walls a PVC water stop without a centre bulb must be placed as shown on the drawings.

Alternative materials with similar properties may be proposed but may only be installed after approval of the Engineer.

PS G 5.5.10.4 Wood-floated finish

Where wood floating is specified or scheduled, the surface shall first be given a finish as specified in G 5.5.10.1 and after the concrete has hardened sufficiently; it shall be floated to a uniform surface free from trowel marks. The screed surface shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screed marks.

PS G 5.5.10.5 Steel-floated finish

Where steel floating is specified or scheduled, the surface shall be treated as specified in PS G 5.5.10.4 except that, when the moisture film has disappeared and the concrete has hardened sufficiently to prevent laitance from being worked to the surface, the screed surface shall be steel-trowelled under firm pressure to produce a dense, smooth, uniform surface free from trowel marks.

PSGA 7 TESTS

PSGA 7.2 Testing

PSGA 7.2.1 General

Replace the contents of this sub-clause with the following:-

"A test shall consist of 6 cubes taken on the site of the specific work. Of these, 3 shall be tested at 7 days and 3 at 28 days at an approved laboratory. Should these tests not meet the requirements of the specification the concrete shall be rejected unless the Contractor can prove, at his own cost, the acceptability thereof. Tests taken at a central production facility for ready mixed concrete as part of their quality control shall not be acceptable for evaluation.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 L: MEDIUM PRESSURE PIPELINES

L 3 MATERIAL

PS L 3.1 GENERAL

Replace the first sentence of L 3.1 with the following:

Duraflow mPVC and uPVC pipes, where relevant, will be used in the water pipelines.

PS L 3.9 CORROSION PROTECTION

PS L 3.9.2 Protection of Steel Pipes and Accessories

All the pipe items of steel with diameters from 100mm and more must, unless otherwise specified be provided of three coats of epoxy paint (KSIR 88 or similar) to provide a final film of 300 micron dried thickness. Application must be according to the suppliers' prescription and must be on the inside and outside. Steel pipe items with diameters smaller than 100mm must be protected using galvanising or epoxy paint.

PS L 3.10 VALVES

All valves must be painted according to an approved method with epoxy paint (KSIR 88 or similar), to provide a final film of 300 micron dried thickness, after manufacturing and testing. Complete technical information of all valves must be submitted to the Engineer for approval before purchase.

PS L 3.10.1 Gate Valves

All gate valves shall be of the AVK type, shall comply with the requirements of SABS 664 and shall be suitable for a minimum working pressure of 1,0 MPa (Class 10), or as indicated on the detail drawings. All gate valves must be supplied with a square spindle nut, suitable to be used with a valve key, or with a hand wheel as indicated on the detailed drawings. One valve key per nut size must be provided and will be included in the rate for valves.

Gate valves shall have socketed ends, unless shown differently on the drawings, and shall be right hand closing. The direction for opening and closing shall be permanently displayed on the valves. Valves shall have non-rising spindles.

Compression shut-off valves with rubber protected gate and smooth finish without recess inside, may be used.

The spindle seal shall consist of at least two O-rings located in a corrosion resistant housing. A wiper ring to prevent ingress of dirt shall be provided. The spindle nut may be loose or fixed in the gate.

The valves shall be provided with a straight, unobstructed body passage without any pocket and the gate shall be completely clear of the waterway in the fully open position. The sealing and gate guide areas shall be designed to eliminate deposits in the valve body. The gate guides shall be of substantial design to support the gate until the point of closure.

All components shall be interchangeable between valves of one size.

The rated working pressure shall be as detailed on the drawings. The valves are required to seal drop tight from zero to a test pressure of 1,1 times the rated working pressure under test and field conditions.

The valve shall be capable of being opened and closed under an unbalanced pressure equal to the rated working pressure.

All flanged gate valves shall be drilled according to SABS 1123. Pipes shall not be tested against a closed valve. Thrust blocks for test sections shall be approved by the Engineer prior to testing of pipes.

L 5 CONSTRUCTION

L 5.1 LAYING

PS L 5.1.1 General

Where connecting to the existing pipeline the position of the existing pipeline must be established by excavating test holes (hand excavation) before any trench excavation to the planned connection point is undertaken. The Service Provider will not be compensated for excavation and any other work that is executed and proves to be unnecessary because this specification was not followed.

PS L 5.4 CONCRETE ENCASING

Replace the first sentence of L 5.4 with the following:

Concrete encasing with concrete with strength of 20 MPa/19mm, must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the concrete encasing. The length of concrete encasing will be determined by means of site instructions from the Engineer.

PS L 5.4.1 Soilcrete Encasing

Add the following:

A mixture of Portland cement and gravel of base quality that is mixed in a ratio of 1:10 must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the soilcrete encasing. The length of soilcrete encasing will be determined by means of a site instruction from the Engineer.

PS L 5.5 ANCHOR BLOCKS

Delete "15 Mpa/37,5mm" in the second sentence and replace with "20Mpa/19mm"

L 5.6 VALVE CHAMBERS

PS L 5.6.1 General

Substitute the first sentence of L 5.6.1 with the following:

The drawings of valve chambers, which are bound into the document, shall supersede the corresponding drawings in the standard specification.

PS L 5.10 CLEANING OF PIPE

Sub clauses (a), (b) and (c) must be adhered to.

PS L 5.11 PIPE MARKERS

Pipe markers shall be installed at 50m intervals on the pipeline route, at all the newly installed isolation and scour valves as indicated on the detailed drawings as well as at all positions where the pipeline route deviates from the horizontal.

PS L 5.12 VALVE CHAMBERS

Valve chambers, to the relevant specified sizes and specifications, shall be installed at all the new positions as indicated on the detailed drawings.

Access step irons; shall consist of polypropylene coated 12mm high tensile steel such as Calcamite or similar approved by the Engineer. The installation of the step iron shall be in accordance with the specifications of the manufacturer.

L 7 TESTING

PS L 7.3 STANDARD HYDRAULIC PIPE TEST

PS L 7.3.1 Test pressure and time of test

Add the following to L 7.3.1.1:

Pipes shall not be tested against isolating valves. Special blank flanges or end caps, fully anchored, shall be provided for testing.

L 8 MEASUREMENT AND PAYMENT

PS L 8.2 SCHEDULED ITEMS

PS L 8.2.3 Extra-over 8.2.1 For the Supply, Fixing And Bedding Of Valves Unit : No

Add the following to L 8.2.3:

Valves are measured and paid for per installation, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings complete as shown on the drawings.

PS L 8.2.11 Anchor/Thrust Blocks Unit : m³

Anchor and thrust blocks shall be measured per cubic metre concrete and the tendered rate shall include for all formwork and reinforcement (where specified) for the required dimensions.

PS L 8.2.16 Cut Into And Connect To Existing Mains Unit : No

The number of each type and diameter of pipe cut into shall measure the cutting into existing mains.

The tendered rate shall include full compensation for all arrangements with the relevant authorities, isolating the main, cutting into the main to accommodate the connecting fitting, dewatering, excavating, removing of excess material, taking steps to prevent the ingress of soil, stones and other material into the main as well as all material and labour to connect the pipe.

PS L 8.2.17 Soilcrete Casing **Unit : m³**

The soilcrete (1:10 ratio) is measured by volume according to the specified width and depth that exceeds the outside volume of the pipe (the volume of the pipe detracted).

The tariff includes the cost of shuttering and soilcrete mixture.

PS L 8.2.18 Pipe Markers **Unit : No**

Pipe markers will be measured and paid for by number and the tariff must include all excavation, installation, and paint and numbering of marker, concrete as well as labour as described in PS L 5.11.

PS L 8.2.19 Valve chambers **Unit : No**

Valve chambers will be measured and paid for by number and the tariff must include all excavation, installation, finishing and numbering of the chamber, all materials as well as labour as described in PS L 5.12.

MECHANICAL SPECIFICATIONS

SD L 3.8.3: Flanges and Accessories

Change "SABS 1123 to SABS 1123: Table 1600/3"

SD L 3.8.4: Loose flanges

Substitute the first sentence of the last paragraph of L 3.8.4 with the following:
Bolts and nuts shall comply with the requirements of SABS 135

PS L 3.9.2 Protection of Steel Pipes and Accessories

All the pipe items of steel with diameters from 100mm and more must, unless otherwise specified be provided of three coats of epoxy paint (KSIR 88 or similar) to provide a final film of 250-micron dried thickness. Application must be according to the suppliers prescription and must be on the inside and outside. Steel pipe items with diameters smaller than 100mm must be protected using galvanising.

SD L 3.9-5: Joints, Bolts, Nuts and Washers

Substitute L 3.9.5 with the following: All joints, bolts, nuts and washers shall be stainless steel.

Add the following to L 3.10

SD L VALVES

All valves must be painted according to an approved method with an epoxy paint (KSIR 88 or similar) after manufacturing and testing. Complete technical information of all valves must be submitted to the Engineer for approval before purchase.

SD Gate Valves

All gate valves shall comply with the requirements of SANS 664 and shall be suitable for a working pressure of 1,6 MPa. All gate valves must be supplied with a square spindle nut, suitable to be used with a valve key. One valve key per nut size must be provided and will be included in the rate for valves.

Gate valves shall have socketed ends unless shown differently on the drawings and shall be right hand closing. The direction for opening and closing shall be permanently displayed on the valves. Valves shall have non-rising spindles. Compression shut-off valves with rubber protected gate and smooth finish without recess inside, may be used.

The body and bonnet shall be epoxy coated internally and externally. The spindle seal shall consist of at least two O-rings located in a corrosion resistant housing. A wiper ring to prevent ingress of dirt shall be provided. The spindle nut may be loose or fixed in the gate.

The valves shall be provided with a straight, unobstructed body passage without any pocket and the gate shall be completely clear of the waterway in the fully open position. The sealing and gate guide areas shall be designed to eliminate deposits in the valve body. The gate guides shall be of substantial design to support the gate until the point of closure.

All components shall be interchangeable between valves of one size. The valves are required to seal drop tight from zero to a test pressure of times the rated working pressure under test and field conditions.

The valve shall be capable of being opened and closed under an unbalanced pressure equal to the rated working pressure.

All flanged gate valves shall be drilled according to SANS 1123 Table 1000/3. Pipes shall not be tested against a closed valve. Thrust blocks for test sections shall be approved by the Engineer prior to testing of pipes.

SD L 3.102 Air Valves

Air valves for potable water shall be suitable for a working pressure of 1.6 Mpa or 2.5Mpa as indicated on the drawings and the schedule. All air valves shall be a combination air valve for both air release and air intake of A.R.I or similar approved.

The branch of the tee on the main pipe shall be minimum 0,67 (2/3) of the diameter of the main pipe.

All air valve installations shall be supplied with an isolating valve and distance piece between the air valve and the branch of the tee, and other fittings shown on the drawings.

Double-acting air valves shall have large as well as small orifices. The large orifice shall have a rubber bed, and the small orifice a brass bed on which the balls can shut. Double-acting air valves shall be flanged and supplied with flanged isolating valves. Air valves shall be designed to remain open until all the air has escaped and shall not close due to the speed of the escaping air.

Loose flange connection Flange connection dimensions according to DIN EN 1092.

SD L 3.10.3 Scour valves

Scour valves shall be suitable for a working pressure of 1.6 Mpa or 2.5 Mpa according to the drawings and schedules.

Scour Valves shall consist of a flanged gate valve of 100mm dia coupled horizontally to a flanged cast iron scour valve tee. The outlet pipe shall be at least 100 mm nominal diameter galvanised steel pipe with 4 mm wall thickness. The outlet shall discharge above ground level in the direction of the fall of the natural ground surface, perpendicular to the main pipe. The outlet end of the pipe

shall be cut diagonally and supplied with a cover that is hinged and that will remain closed unless it is forced open by the water. The hinge shall be non-removable.

Scour valves on 75 mm diameter pipes shall be the same as above except that a 75 x 75 mm diameter fire hydrant tee shall be used and that the gate valve and outlet pipe shall both 75 mm diameter.

SD L 3.10.4 Bulk Water Meter

New bulk water meters shall be installed as shown on the drawings.

Technical requirements for the meters.

FLOW SENSOR Measuring system

The flow sensor shall utilise pulsed DC measuring technology. D.C. excitation frequency of 3 1/8 Hz shall be utilised.

Sensor tube, the flow sensor measuring tube shall be made from stainless steel AISI 304 grade.

Sensor tube liner,

The flow sensor tube shall be lined with a Neoprene lining and be capable of operating under the following conditions:

Temperature rating 0 to 95°C

Pressure rating: 1 kPa to 4000 kPa (Absolute)

Earthing Electrodes,

The flow meter shall be provided with both sensing and earthing electrodes built into the flow meter, eliminating the need for earthing rings. The material of the electrodes must be 316Ti stainless steel. The electrodes shall be the non-removable type.

The flanges of the meter shall be drilled and tapped and shall be provided with stainless steel screws and washers and earthing pigtailed for earthing continuity across the meter onto the steel pipeline on both ends of the meter. The earth pigtailed shall be 500 mm in length and shall consist of braided copper strap properly lugged and soldered with lugs on both ends. Stainless steel machine screws for this purpose shall be at least 6 mm Ø and 4(four) spare screws shall be provided with each meter

Housing and Flange material

The housing and flange material shall be manufactured from low-grade carbon steel BS4360 grade 43A or (St. 372) and coated with an epoxy coating to a minimum thickness of 150mm.

Direction of Flow

The forward flow direction indication shall be provided on of the meter housing in a position which can be seen from the top of the meter. This indication shall be in the form of an arrow forming part of the casting or in the form of an engraved brass plate with an arrow and fixed to the housing with drilled and tapped stainless steel machine screws.

Connection Enclosure Protection.

The rating of the connection enclosure shall be standard IP 67 to (EC 529 (3 m weg. for 72 hours) but field upgradeable to IP 68 to IEC 529 (10 mwg.). The protection rating shall be IP68 after completion of the installation and the supplier of the meter shall provide the resin kit for this purpose and shall ensure that the sealing is done properly after the meter is installed and before the ingress of any moisture in the connection enclosure.

The signal cable and power supply cable connections to the meter connection box will be done by others on site and the supplier shall ensure that the connections have been done correctly before meter connections are sealed. Design pressure..

The design pressure shall be 1.5 x PN.

Flange Specifications-

Flange rating of flow sensors shall be as follows:

BS4504	(SABS I 123)
	DN 25-50 PN 25 DN 65-150 PN 25
	DN 200-300 PN 25

Calibration certificate

A manufacturer's calibration certificate, showing calibration twice at two calibration points, shall be supplied with each flow sensor. The measuring uncertainty of the meters will be equal to or better than $\pm 0.5\%$ of actual flow for flow velocities > 0.5 m/s.

Memory backup

The flow meter shall have non-volatile memory, preferably in the form of a removable EEPROM with flow sensor data stored in the EEPROM which shall contain at least the following data:

- Serial number
- Sensor size
- Calibration factor
- Totalized flow volume
- Any other data required by the instrument

The EEPROM shall have sufficient RAM capacity to store the data. It is a specific requirement of this Contract that totalized stored value shall not be lost upon failure of any component of the flow meter except the memory chip itself. The totalized stored value shall also not be lost upon replacement of any components in the flow sensor or of the converter or upon re-calibration of the instrument.

The Tenderer shall state, in the space provided for that purpose further herein how calibration will be done on site and what will be required to ensure recalibration of the converter and/or sensor unit in the case of re-placement on site of any of these items.

It is a specific requirement of this Contract that re-calibration on site be uncomplicated and easily executable without the use of expensive external programming equipment such as computers.

Terminal Box.

The terminal box shall be manufactured from glass-fibre reinforced polyamide and shall have proper lid and seal, apart from the requirement of the sealing to IP68 standards

SIGNAL CONVERTER

Enclosure

The signal converter must be in an IP67 enclosure with a membrane protected keypad and LCD display. The converter will be mounted in a steel enclosure with a glass front window, and it shall be possible to read the display through the glass window without having to open the enclosure. The steel enclosure will be supplied and installed by a specialist supplier accredited contractor who will also mount the converter together with the relevant protection equipment and terminals. It is a requirement that the Contractor for the Contract shall work in close liaison with the manufacturer and installer of the steel housings to ensure that the converter display is visible through the glass front.

The Contractor for the Contract' shall further work in close liaison with the manufacturer of the enclosures and the Engineer to ensure that the steel housings are sufficiently ventilated for the converter as these housings will in many cases be mounted on a steel stand in the open without protection against the sun.

Details of the housings can be obtained from the Engineer on request.

Accuracy.

The accuracy for the signal converter shall be as follows:

Error of better than $\pm 0.5\%$ of actual flow between flow velocities >0.5 m/s and 10 m/s.

The repeatability shall be better than 0.1 % of actual flow for $V > 0.5$ m/s.

Measuring Ranges.

The measuring range shall be auto-ranging (selectable) between 0-0.25 m/s and 0-10 m/s. The Signal converter shall be capable of being used for flow sensor sizes from DNö to DNI 200.

Signal Outputs.

All outputs shall be galvanically isolated.

The signal converter shall provide 3 outputs:

Analogue output: 0 to 20mA or 4 - 20mA,

User selectable. Load $<800\Omega$.

Time constant adjustable 0.1 to 30 seconds.

Pulse output or frequency output, user selectable:

-Frequency output mode: Frequency: 0-10 kHz, 50 % duty cycle, adjustable 500Hz, 1 kHz, 5kHz: 10kHz, with adjustable time constant selectable between 0.1 to 30 seconds.

-Pulse output mode: user selectable negative/positive pulse with (17) adjustable pulse widths from 64.µs to 4.2 seconds. With selectable volume unit/pulse

Relay output: Change-over type 42 VACI 2A or 24 VOC, IA selectable as error or control or for low or high flow limit switch with adjustable hysteresis.

Counters

Two independent, integral counters must be capable of totalising flow either as forward flow, reverse flow or as net flow.

Zero point adjustment

Zero-point adjustment must be automatic.

Non-full pipe detection

The signal converter shall be capable of non-full pipe detection

Display

The signal converter display shall be a multi-line multi-character LCD display with alphanumeric character sets and at least two lines must be capable to be selected for test or text and an additional process variable. The display shall preferably be backlit.

The display parameters shall be user selectable to display the units of flow and of totalization i.e. l/s, m³/hr, MI, etc. The instrument shall further be suitable to display flow and total capacity simultaneous. Details of the parameters that can be displayed must be provided in the space allowed for such information, as required further herein.

Signal processing

The signal processing must be microprocessor based and be capable of continuously monitoring the electronics and compensating for temperature drift via a self-monitoring circuit. The analogue to digital conversion shall be processed by a 23-bit ASIC.

The signal converter shall have a turndown ratio of 3000: 1. A high input impedance shall be provided of > 10 to 140.

The instrument shall further compensate automatically for temperature drift and shall be suitable to operate in an ambient temperature of -20 0 C to +50 0 C. Instruments which can function accurately at higher temperatures will be considered favourably.

Ease of Commissioning, Calibration and Re-calibration

It is a specific requirement of this Contract that re-calibration on site be uncomplicated and easily executable without the aid of expensive external programming equipment such as computers.

All variables must be programmable into the converter via a membrane protected keypad on the converter and a user-friendly cascading menu structure.

The menu structure must furthermore allow for the manual programming of calibration information into the memory of the converter, in the event of a faulty or a missing program chip.

Power supply

The power supply to the converter will be 230V AC \pm 5%, 50 Hz. If any other supply voltage is required for the converter or the sensor unit, then such power supply unit shall form part of this Contract and shall be supplied by the Contractor for this Contract. The same applies to

any back-up batteries which may be required for the instrumentation.

It is, however, preferred that flow meters be offered which do not require back-up batteries as the maintenance of batteries will be problematic for the Client after the lapse of the 24 month maintenance period of this Contract. Details of the power supply requirements must be provided in the space allowed for such information, as required further herein.

Diagnostics

The signal converter shall provide an integral diagnostic feature to monitor all internal circuitry and identify errors. The level of any such errors must be identified as fatal, permanent or warning and be logged and stored. The last 9 errors must be stored in the memory of the unit for a minimum of 180 days. A warning icon must appear on the display when an error occurs. It must be possible for the operator to view the error-code associated with the fault via a service menu on the display.

PIN protection

Access to the menu structure, allowing changes to the settings, shall be protected by PIN to prevent unauthorised tampering. Authorised personnel must however be allowed access to change the PIN if and when required.

In "view-mode", the operator must be able to scroll through the settings and readings without allowing him to change any of the settings, unless he knows the PIN.

Surge and Lightning protection

Lightning and surge protection modules will be installed by others in the sheet steel housings of the converters. 40 kA MOV type arrestors will be installed from both the phase and the neutral wires of the 230 V incoming main down to earth.

The power and signal cable from the converted to the sensor head will be protected with low voltage 5 kA MOV arrestors. Each core of these cables will be protected down to earth with MOVs, thus 4 low voltage MOVs.

The flow sensor head side of these cables must be protected by the Contractor for this Contract with suitable MOV type arrestors which must be mounted inside the IP 68 cable enclosure on the casing of the meter. These MOV;'s will be regarded as part of the flow sensor.

Cable between sensor and converter

Two separate lengths of cable, of the same type, will be supplied and installed and connected between the flow sensor and the signal converter by others. The cables will be 0,5 mm² 3 -core (16/0,20 mm tinned copper wire) PVC covered with a screen consisting of tinned copper wire braid with 85% coverage.

The cable will comply with DEF SPEC 61-12 (Pan 5) and will have a maximum resistance of 40 /km. at 20°C.

The Contractor for this Contract shall ensure that connections are done correctly before the flow sensor box is sealed to IP 68 specifications.

installation of meter

The meter shall be installed by a person approved by the supplier in order to validate the guarantee.

All accessories for the complete installation shall be supplied by the Contractor. All metal work shall be painted according to specifications after the testing and completion of the installation.

SD 1.3.10.5 Reflux Valves

Reflux valves shall be suitable for a working pressure of 1,6 Mpa and, unless otherwise indicated, shall be flanged. The casing and flap shall be manufactured from close-grained cast iron with a brass face on the flap that close onto a corresponding brass plane in the casing. The hinge pin shall swivel freely in bearings on both sides of the casing. Cone-shaped rubber-seal reflux valves with stainless steel cones may be used if approved by the Engineer.

A Ball Check Valve full bore reflux valves, with sinking ball, for installation in horizontal or vertical riser pipes, complying with the requirements of SANS shall be used for water pump lines (suitable for 1.0 MPa working pressure). The following specifications will apply:

- body and bonnet of ductile iron
- ball of aluminium, fully covered with rubber (NBR),
- bolts and nuts of stainless steel (A2),
- bonnet seal ring of NBR, Corrosion protection: inside and outside epoxy coating

SD L 3.10.6 Control Valves

The casing of the control valves shall be manufactured from close grained cast iron and the flanges shall be drilled according to SANS 1123 Table 1600/3. The valves shall be of the diaphragm single bed ball-type controlled hydraulically by a pilot valve. The main valves shall be fixed on three sides with single removable bronze beds and synthetic rubber disks with a rectangular cross-section, with disk clamps. No packing material will be allowed and repairs must be done without removing the valve from the pipeline.

The design must be such that no water can come from the main valve into the pilot valve system. Bermad type 700 with a V-port throttling plug, or a similar product, must be used. If the pressure in the main pipe is not sufficient to control the valve, a connection shall be made with the lump line.

SD L 3.10.7 Actuators

Actuators shall be designed for valve operation to ensure proper function in accordance to EN 15714-2:2010 electric actuators for industrial valves - basic requirements. Depending on application actuators shall be designed for ON-OFF, short-time duty (S2-15min) respectively Class A and B according to EN 15714-2 or MODULATING, intermittent duty (S4-25%) respectively Class C with up to 1.200 starts per hour; no. of starts depending on actuator size and output speed.

Actuator shall have a design life of 10 000 OPEN-CLOSE cycles, each consisting of 30 turns per sense of rotation and must be suitable for operating in any mounting position. Actuation design must provide simple setting, testing, maintenance and repair.

Actuator settings shall be performed non-intrusive via push-buttons at motor control without special tools or instruments (e.g. battery backed setting tool). A wireless Bluetooth Interface shall be available. Microsoft Windows TM based software running on a conventional computer shall be available to allow actuator set-up and diagnoses.

Depending on valve application, actuators shall be self-locking. Self-locking shall remain active if actuator is switched to hand-operation-mode. For non-self-locking actuators with high output speeds a mechanical anti-back drive device shall be provided attached to the actuator. Valve mounting dimensions shall be according to ISO 5210 with use of a plug sleeve connection adapting to valve shaft. For rising stem applications, actuator design must allow actuator removal from output drive without disturbing the valve function.

DS5 MECHANICAL EQUIPMENT

SCOPE

This section of the contract covers the supply, delivery, erection, installation, commissioning, testing and upholding during the period of maintenance of electrically driven positive displacement borehole pumps for one boreholes, pipes, valves and auxiliary gear, etc, for 9 boreholes with all accessories as described

5.2 BOREHOLE PUMP

9 boreholes are to be Installed under this Contract.

Pumps shall be of the helical rotor positive displacement borehole type.

The pump elements most be as detailed below:

Pumping element

The pump unit is to be of the helical rotor positive displacement screw type design. The rotor could be made from either EN8 or brass and then hard chrome-plated of suitable thickness to ensure long life. The stator is to be of a nitrile rubber material which is to be abrasion resistant and also to have some degree of chemical resistance especially that of oil or diesel which may find into the borehole. The flexible shaft which drives the rotor to be of EN57 stainless steel and of adequate length to be able to take up the eccentricity of the rotor along this length.

Two spider or datum bearings are to be installed at the end of the pump closest to the columns to ensure that the full eccentricity of the rotor is eliminated when connecting the flexible shaft and/or input shaft to the drive shafts. A strainer of adequate proportions is to be fitted to each pump and must be seemly fastened to the stator housing. All joints on the pump element are to be bonded with an epoxy resin compound to prevent unscrewing.

• Stabilisers

A stabiliser which centralises the columns within the boreholes is to be tilted every 12 m on the rising main. These stabilisers are to be manufactured in nitrile rubber and are to be adequately proportioned to support, centralise and prevent vibration of the rising main

• Shafts

All shafts are to be of EN3A as a standard or EN57 where appropriate and to be of rolled material and machined to specific length with chamfers and dimples on the end of each shaft which are to be machined on each end to reduce the contact area inside of the coupling. All threads are to be rolled to ensure maximisation of power transmission

• Bobbin bearings

The bobbin bearing comprises three components, namely, the bobbin rubber, the bearing piece and two couplings. The bobbin rubber is to be manufactured from nitrile rubber and to be of adequate proportions to support the shaft centrally within the columns. The bearing piece is to be made from EN57 stainless steel with ends which have rolled thread. The shaft couplings are to be of EN8 and must be adequately proportioned to fit the shafts and bearing piece and be able to transfer the relative power and prevent vibration of the rising main

• Discharge head

The discharge head is to be manufactured of cast iron adequately sized to support the mass of the pump, columns, shafting and liquid within the rising main. An anti-reverse device is to be fitted to ensure that the discharge head pulley assembly can rotate in its single direction only. The bearings that are fitted within the discharge head are to be adequately sized to accommodate the energy consumed by the pump system, as well as the sideways thrust when driven by an electric motor or a quarter twist drive from a diesel engine.

The discharge head must have a gland which will be suitable for high pressure discharge when pumping to an elevated point above the well. A thrower (flinger) is to be supplied to prevent any water escaping the gland area from spraying into the bearing assembly. The bearing assembly is to be fitted with an oil seal to prevent the ingress of water along the top shaft. The discharge head is to have an EN57 stainless steel drive shaft capable of handling the torque of the system.

When an electric motor is used for purposes of drive, an adequately sized spacer box and motor mount bracket is to be supplied to ensure that the motor is capable of being cooled sufficiently. The electric motor and bearings must be suitable for operation in a vertical shaft upwards position.

• Columns

The columns are to be of heavy wall SABS 62 material and each end is to have parallel truncated threads and the ends are to be square. The columns are to be galvanised as a standard both internally and externally. The column socket is to be manufactured from either cast iron or drawn steel tube to ensure that the outside diameter is of adequate size to enable clamping devices to be utilised for installation.

The sockets are to have matching thread to suit the columns. The sockets could be galvanised or plain. No belled or expanded metal sockets are to be used on either the columns or the pump element.

5.4 PUMP CONTROL.

Refer to Particular specifications below.

5.5 PIPING AND PIPE fittings;

5.5.1 Piping

The Tenderer shall include for the supply and delivery to site and for the installation and testing of the purpose made piping as indicated on the drawing.

The layout of pipe work shall be such as to facilitate dismantling, inspection and maintenance. The pipes must be properly supported and so arranged that all stresses created in the pipe line by static and dynamic forces, including recoil shock, will be taken up by suitable anchors.

The Tenderer shall include for the supply and delivery, to site and for the installation and testing of all of the interconnecting pipework and specials, necessary for the complete plant, including the pipework and valves.

The Tenderer shall submit drawings showing the dimensions and layout of all pipework.

Design Requirements

1.1 Electric motors

Motors must be suitable for operating at 3 phase power supply voltage of 415Volt AC (4+/- 10%), 50Hz. (+/- 2%) and shall be specifically designed for valve-actuator operation, characterized by high starting torque, low stall torque and low inertia. Motors shall be totally enclosed non ventilated type (TENV). Motor housings and covers to be made of sea water resistant aluminium. Motor-insulation must be in accordance with IEC 85 Class F (155° C). Motors must be protected by 3 thermal monitoring devices, which are embedded in motor windings. Motor connections shall be internal by means of plug and socket.

Motors must be totally separated from lubricant-filled gearing of actuator, allowing replacement of motor without loss of lubricant regardless of mounting position. Motors shall have a dog coupling as mechanical connection to actuators worm shaft.

Actuator motors must develop full torque when power is turned on. All motors shall be of high starting torque type to facilitate 'unseating' of the valve. Each motor shall have a rating plate marked in accordance with IEC 34.1 as far as applicable.

1.2 Diagnosis

Actuators installed in critical applications, shall be optionally equipped with a sensor package, consisting of torque, temperature and vibration diagnosis. In this case actuators shall also have a real time clock for event recording to support asset management functions and life cycle analysis. Display indications shall follow NAMUR recommendations with simplified status indications, operation log and torque curves.

1.3 Motor and local controls

Integral motor controls shall be microprocessor based and include mechanically and electrically interlocked reversing contactors for ON-OFF duty and solid-state contacts (thyristors) for MODULATING duty actuators.

Local controls shall consist of motor controls, push buttons OPEN-STOP-CLOSE-RESET, lockable selector switch LOCAL-OFF-REMOTE and a wireless Bluetooth interface with separate indication showing wireless connection as active, as well as LCD graphic display clearly visible under all lighting conditions with plain text and in World languages, diagnosis symbols, graphs. Five indication lights, available in different color codes, showing status information such as end position open/close, torque fault in both directions and motor protection tripped.

Local controls shall consist of motor controls, push buttons, OPEN-STOP-CLOSE-RESET, lockable selector switch, LOCAL-OFF-REMOTE and a wireless Bluetooth, interface with separate indication showing wireless connection as active, as well as LCD graphic display clearly visible under all lighting conditions with plain text and in WORLD languages, diagnosis symbols, graphs. Five indication lights, available in different color codes, showing status information such as end- position open/close, torque fault in both directions in motor protection tripped.

Local controls shall be electrically attached to actuator via plug and socket connection. It shall be possible to re-position local controls at every 90°, so that push buttons and indication lights will face the operator.

In case actuators have to be mounted in difficult to access positions, it shall be possible to separate local controls (including motor controls) from actuator. A wall bracket shall be available to mount local controls I motor controls near valve actuator for distances up to 50 m cable length.

Depending on detailed project design, actuator version shall be as follows:

1.ON-OFF, short-time duty S2-15min with hard wired signals OPEN-STOP-CLOSE, including a 4-20mA output signal, internally powered. Detailed wiring diagram to be supplied with submittal documents.

2.MODULATING, intermittent duty S4-25% with hard wired communication via 4-20mA input signal, including a 4-20mA output signal, internally powered. Detailed wiring diagram to be supplied with submittal documents.

Detailed wiring diagram shall show all relevant signals such as valve position, end positions (OPEN/CLOSE), selector switch position and high torque alarm in OPEN/CLOSE direction. In addition to this, actuator must provide a dedicated fault signal if there is a phase failure, motor protection tripped and/or high torque in OPEN/CLOSE direction or if hand wheel is engaged.

All control signals, communication signals as well as main power supply must be wired to a multi pin plug and socket for customer connection. Terminal compartment shall provide sufficient space to accommodate the possible maximum number of incoming wires. A minimum of three cable entries must be provided for motor power cable and digital/ analogue inputs and outputs. Each cable entry shall be properly sealed by cable glands during site installation. Cable glands shall be chosen by contractor, responsible for wiring during commissioning phase.

Each actuator shall provide an adequately sized internal and external connection for grounding.

1.4 Anti-condensation heater

In order to prevent condensation, a heater must be installed inside the actuator, suitable for continuous operation. Actuator must provide an alarm signal in case of failure of anti-condensation heater.

1.8 Enclosures

Protection class of actuator, including motor, shall be IP 68, according to EN 60529 against submersion up to 8 m head of water for at least 96 hours. During submersion it must be possible to operate the actuator at least 10 times.

1.9 Hand wheel

Actuators must be equipped with a hand wheel for manual operation. Clockwise operation of hand wheel shall cause clockwise movement of output drive. Hand wheel shall be clearly marked with an arrow and the word 'CLOSE'.

Hand wheel engagement shall be of spring-loaded push mechanism type and required manual declutching. Actuator must provide a switch signal when in manual mode.

Under manual operation, hand wheel shall drive the worm shaft. Self-locking shall be maintained in hand operation. Motor must be disengaged during manual operation. Hand wheel shall automatically disengage when the electric motor is energized.

Hand wheel must be sized allowing easy manual operation of output drive. The over torque indication shall be active in manual operation as well as motor operation, thus allowing a signal to be provided when the set-torque has been reached.

1.10 Bearings and gears

Bearings shall be of antifriction or self-lubricating type. Bearings shall not acquire any maintenance between general overhauls. Power gears shall be made from heat treated steel. Worm-wheels shall be made of bronze material. Actuator gear housing shall be filled with an adequate quantity of lubricant. Re-lubrication between general overhauls shall not be required.

1.11 Noise level

Under all operating conditions the noise level of actuators shall not exceed 75 dB(A) at 1 m.

1.12 Name plates

Two nameplates, made of aluminium, shall be attached to each actuator; one on the motor housing, showing all relevant motor data, one on the actuator housing showing all relevant actuator data. Special information, such as valve tag no., shall be shown if required. Nameplates shall be securely fixed to actuator and motor, so that they cannot be removed or scratched off during shipment, installation, operation or maintenance.

1.13 Painting and corrosion protection

Actuator corrosion protection shall fulfil the requirements of EN ISO 12944-2, classification of environments C4 with a specified salt spray test of 720h. Actuator painting must be performed in such a way, that no corrosion takes place under ambient conditions as specified. All outside screws or bolts shall be made of stainless steel (A2). Actuators shall be corrosion protected with a primer coating and a two-layer powder coating consisting of an epoxy coating and a polyurethane top coating with a total film thickness of at least 140µm. Final color shall be silver grey similar to RAL 7037.

1.14 Inspection and Testing at Manufacturer's work

Each actuator shall be factory tested. Tests shall be performed in accordance IEC standards as far as applicable. A final inspection record shall be supplied with each actuator showing general actuator data, nominal current, no load current, starting current, power factor at rated torque, output speed, torque setting, limit setting (turns/stroke), high voltage test, functional test (including all options) and visual test.

1.15 Documentation

Supplier to provide storage-installation-and operation instruction as well as electric wiring diagram, dimensional drawings and technical data sheet including motor data as per manufacturer standard.

2. GEARBOXES

Gearboxes shall be provided for valves of size DN 200 and larger. Gearboxes shall have ingress protection to IP 55.

The gearbox shall incorporate a mechanical position indicator and a slipping clutch as described above.

Manually operated gearboxes shall be provided with a stainless-steel grease nipple.

2.1 MATERIALS

The body and disc shall be of ductile iron or of cast steel.

PROJECT SPECIFICATION

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

SABS 1200 LB : BEDDING (PIPES)

LB 1 SCOPE

PS LB 1.1 SCOPE

Add the following to LB 1.1:

This specification also covers the bedding required for sleeve pipes.

LB 3 MATERIALS

PS LB 3.1 SELECTED GRANULAR MATERIAL

Substitute LB 3.1 with the following:

Selected granular material shall be an aggregate, sand or granular material, all of a non-cohesive nature and free from any organic material, of which the grading analysis shows 100 % passing a 13,2 mm sieve and not more than 5 % passing a 0,075 mm sieve.

Only if approved by the Engineer may sand from the trench excavations be used as selected material.

PS LB 3.2 SELECTED FILL MATERIAL

Substitute LB 3.2 with the following:

The requirements of PS LB 3.1 shall apply *mutatis mutandis*.

PS LB 3.3 BEDDING

Add the following to LB 3.3:

All pipes shall be classified as flexible pipes and shall have a bedding of selected granular material and selected fill material.

LB 3.4 SELECTION

PS LB 3.4.1 Suitable Material from Trench Excavation Available

Replace the first sentence of LB 3.4.1 with the following:

Notwithstanding the requirements DB 3.7 and LB 3.4.1 relating selected excavation methods, the Service Provider must follow selected excavation methods and provide or use plant that will prevent material that is suitable and necessary for bedding being contaminated.

LB 5 CONSTRUCTION

LB 5.1 GENERAL

PS LB 5.1.4 Compacting

Substitute "90 % of Mod. AASHTO" in LB 5.1.4 with "93 % of Mod. AASHTO".

If sand is used the compaction grade must be 100% Mod. AASHTO.

LB 8 MEASUREMENT AND PAYMENT

LB 8.1 PRINCIPLES

PS LB 8.1.1 Supply of Bedding Materials Measured Separately

Add the following to LB 8.1.1:

Payment for bedding material and selected fill material is only made if the selected trench excavation material cannot be used in the same position as bedding material but has to be obtained from another part of the site of works or designated borrow pits, or from commercial sources.

PS LB 8.1.4 Separate Items for Cradle and Blanket

Substitute LB 8.1.4 with the following:

No distinction shall be made as regards material for the bedding cradle and selected fill blanket, and the material shall comply with the requirements for material for bedding cradle.

PS LB 8.1.5 Disposal of Displaced Material

Add the following to LB 8.1.5:

Surplus displaced material shall be dumped and levelled at the spoil site.

LB 8.2 SCHEDULED ITEMS

PS LB 8.2.5 Overhaul Of Material For Bedding Cradle And Selected Fill Blanket Unit : m³.km

Substitute LB 8.2.5 with the following:

- | | | |
|----|-------------------------------------|---------------------------|
| a) | Limited overhaul (0,5 km to 1,0 km) | Unit : m ³ |
| b) | Long overhaul | Unit : m ³ .km |

Except that the volume is calculated according to LB 8.1.3, the requirements of D 8.3.6 or DA 8.3.3, as applicable, shall apply for overhaul.

SD L 3.10.4 WATER METERS Unit: No

The rate for water meters shall cover the cost of the supply of a flanged water meter, with the necessary couplings to be connected to the appropriate pipes, the installation, testing and putting into operation of the complete meter

SD L 3.10.6 CONTROL VALVES Unit: No

The rate for control valves shall cover the cost of the supply of a flanged control valve, with a flanged gate valve of the same diameter, with the required fittings, couplings, piping etc. to be connected to the appropriate pipes, as well as the pilot valve, copper pipe, etc. and for the complete installation, testing and putting into operation of the valve.



CAPRICORN DISTRICT MUNICIPALITY

C6. OHS Specifications for construction projects

5.1 Specification

1. PREAMBLE

In terms of Construction Regulation 4(1) (a) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), the Capricorn District Municipality, as the Client, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Principal Contractor who is making a bid or appointed to perform construction work for the Client on its behalf with the same.

The Client's further duties are as described in The Act and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. Notwithstanding this, cognisance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.

Due to the wide scope and definition of construction work, every construction activity and site will be different, and circumstances and conditions may change even on a daily basis. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. *This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan.* The Health and Safety Plan shall include documented 'Methods of Statement' (see definitions under Construction Regulations) detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the Risk Assessment.

2. SCOPE OF HEALTH AND SAFETY SPECIFICATION

The Health and Safety Specifications pertaining to this project; cover the subjects contained in the index and is intended to outline the normal as well as any special requirements of the Client pertaining to the health and safety matters (including the environment) applicable to the project in question. These Specifications should be read in conjunction with the Act, the Construction Regulations and all other Regulations and Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as

those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

3. PURPOSE

The Client is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments, and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for the Capricorn District Municipality. The Principal Contractor is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

- a) Safety considerations affecting the site of the project and its environment;
- b) Health and safety aspects of the associated structures and equipment;
- c) Submissions on health and safety matters required from the Principal Contractor and,
- d) The Principal Contractor's health & safety plan.

To serve to ensure that the Principal Contractor is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 8 of the Act.

To inform the Principal Contractor that the Occupational Health and Safety Act, 1993 (Act 85 of 1993) in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations shall apply to any person involved in construction work pertaining to this project, as will the Act.

4. DEFINITIONS

"Purpose of the Act" –

To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"Agent" –

means any person who acts as a representative for a client;

"Client" –

means any person for whom construction work is performed;

"Construction Work" is defined as any work in connection with –

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;

- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

“Contractor” –

means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors;

“Health and Safety File” –

means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

“Health and Safety Plan” –

means a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified;

“Health and Safety Specification” –

means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons;

“Method Statement” –

means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

“Principal Contractor” –

means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site;

“Risk Assessment” –

means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

5.1 Structure and Organisation of OH&S Responsibilities

5.1.1 Overall Supervision and Responsibility for OH&S

- The Client and/or its Agent on its behalf to ensure that the Principal Contractor, appointed in terms of Construction Regulation 4(1)(c), implements and maintains the agreed and approved H&S Plan. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any one or more of his/her duties under the Act and Regulations.
- The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act.
- All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective appointment forms to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether

the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).

- The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 6 to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).
- All Health and Safety Representatives (SHE-Reps) shall act and report as per Section 18 of the Act.

5.1.2. **Legal Appointments**

Several appointments or designations of responsible and /or competent people in specific areas of construction work are required by the Act and Regulations. The following competent appointments, where applicable, in terms of the Construction Regulations are required to ensure compliance to the Act, Regulations and Safety Standards.

Required appointments as per the Construction Regulations: -

Item	Regulation	Appointment	Responsible Person
1.	4(1)(c)	Principal contractor for each phase or project	Client
2.	5.(3)(b)	Contractor	Principal Contractor
3.	5(11)	Contractor	Contractor
4.	6(1)	Construction supervisor	Contractor
5.	6(2)	Construction supervisor sub-ordinates	Contractor
6.	6(6)	Construction Safety Officer	Contractor
7.	7(1)	Person to carry out risk assessment	Contractor
8.	7(4)	Trainer/Instructor	Contractor
9.	8(1)(a)	Fall protection planner	Contractor
10.	10 (a)	Formwork & support work supervisor	Contractor
11.	10(e) + (f)	Formwork & support work examiner	Contractor
12.	11(1)	Excavation supervisor	Contractor
13.	11(3)(b)(ii)(b)	Professional engineer or technologist	Contractor
14.	11(3)(k)	Explosives expert	Contractor
15.	12(1)	Supervisor demolition work	Contractor
16.	12(2) + (3)	Demolition expert	Contractor
17.	12(11)	Explosives expert	Contractor
18.	14(2)	Scaffold supervisor	Contractor
19.	15(1)	Suspended platform supervisor	Contractor
20.	15(2)(c)	Compliance plan developer	Contractor
21.	15(8)(c)	Suspended platform expert	Contractor

Item	Regulation	Appointment	Responsible Person
22.	15(13)	Outrigger expert	Contractor
23.	17(8)(a)	Material hoist inspector	Contractor
24.	18(1)	Batch plant supervisor	Contractor
25.	18(7)	Batch plant operator	Contractor
26.	19(2)(b)	Power tool expert	Contractor
27.	19.2 (g) (i)	Power tool controller	Contractor
28.	20(f)	Tower crane operator	Contractor
29.	21(1)(d)(i)	Construction vehicle and mobile plant operator	Contractor
30.	21(1)(j)	Construction vehicle and mobile plant inspector	Contractor
31.	22(d)	Temporary electrical installations inspector	Contractor
32.	22 (e)	Temporary electrical installations controller	Contractor
33.	26 (a)	Stacking and storage supervisor	Contractor
34.	27 (h)	Fire equipment inspector	Contractor

This list may be used as a reference or tool to determine which components of the Act and Regulations would be applicable to a particular site. This list must not be assumed to be exclusive or comprehensive.

5.2 Communication & Liaison

- 5.2.1 OH&S Liaison between the Employer, the Principal Contractor, the other Contractors, the Designer and other concerned parties shall be through the project Committee as per the procedures determined by the project Committee.
- 5.2.2 In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.
- 5.2.3 Consultation with the workforce on OH&S matters will be through their Supervisors and H&S Representatives ('SHE – Reps')
- 5.2.4 The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and/or its Agent on its behalf and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

6. RESPONSIBILITIES

6.1 Client

- 6.1.1 The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations and determined by the Bills of Quantities.
- 6.1.2 The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.
- 6.1.3 The Client or his appointed Agent on his behalf, will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.
- 6.1.4 The Client or his appointed Agent on his behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:

- have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
- have failed to implement or maintain their health and safety plan;
- have executed construction work which is not in accordance with their health and safety plan; or
- act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

6.2 Principal Contractor

- 6.2.1 The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3 of the Construction. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.
- 6.2.2 The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation. *This Specification is not intended to supersede the Act nor the Construction Regulations or any part of either.* Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this contract will continue to be legally required of the Principal Contractor to comply with. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.
- 6.2.3 The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.
- 6.2.4 The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- 6.2.5 The Potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations.
- 6.2.6 The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- 6.2.7 The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Sub-contractor.
- 6.2.8 The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.

6.2.9 The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.

6.2.10 The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.

7. SCOPE OF WORK

These specifications are applicable to the specific scope of work pertaining to the project as detailed in the tender documents. **Refer to Project specification.**

8. HEALTH AND SAFETY FILE

The Principal Contractor must, in terms of Construction Regulation 5(7), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done.

The Health and Safety File will remain the property of the Client and/or its Agent on its behalf throughout the period of the project and shall be consolidated and handed over to the Client and/or its Agent on its behalf at the time of completion of the project.

The safety file shall contain the following documentations:

- Safety reports,
- Notification documents,
- Appointment letters,
- Records of incidents,
- Records of training,
- Records of safety meetings,
- Records of PPE provision,
- And any other document related to safety issues on site.

9. MONITORING AND REVIEWING OH&S PERFORMANCE

The Principal Contractor is required to maintain acceptable incident rate and report on this to the Client and/or its Agent on its behalf on a monthly basis. The frequency rates must reflect permanent disability, lost workdays, restricted workdays, medical treatment and first aid treatment.

10. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The Principal Contractor is required to develop Risk Assessments, Standard Working Procedures (SWP) and Method Statements for each activity executed in the contract or project. The identification of hazards is over and above the hazards identification program and those hazards identified during the drafting of the Health and Safety Plan. Hazard identification should be conducted continuously over and above the baseline risk assessment.

11. ARRANGEMENTS FOR MONITORING AND REVIEW

11.1 Monthly Audit by Client

The Client and/or its Agent on its behalf will be conducting Periodic Audits at times agreed with the Principal Contractor Audit to comply with Construction Regulation 4(1)(d) to ensure that the principal Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan.

11.2 Other audits and inspections

The Client and/or its Agent on its behalf reserves the right to conduct any other ad hoc audits and inspections as it and/or its Agent on its behalf deem necessary.

A representative of the Principal Contractor and the relevant Health and Safety Representative(s) (SHE-Reps) must accompany the Client and/or its Agent on its behalf on all Audits and Inspections and may conduct their own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results. The Client and/or its Agent on its behalf may require to be handed a copy of the minutes of the previous Health and Safety Committee meeting reflecting possible recommendations made by that committee to the Employer for reference purposes and any other health and safety related issues.

11.3 Reports

- 12.3.1 The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she dies, becomes unconscious, loses a limb or part of a limb, is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed, or where a major incident occurred, the health or safety of any person was endangered, where a dangerous substance was spilled, the uncontrolled release of any substance under pressure took place, machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects, machinery ran out of control, to the Provincial Director of the Department of Labour within seven days and at the same time to the Client and/or its Agent on its behalf.
- 12.3.2 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations.
- 12.3.3 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".
- 12.3.4 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports. As soon as the occurrence of any accident/incident of whatever nature comes to the notice of the Principal Contractor, it shall be reported immediately to any of the following:

11.4 Review

The Principal Contractor is to review the Hazard Identification, Risk Assessments and Standard Work Processes at each Production Planning and Progress Report meeting as the construction work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The Principal Contractor must provide the Client and/or its Agent on its behalf, and all other concerned parties with copies of any changes, alterations or amendments

11.5 Site Safety Rules

11.5.1 Site OH&S Rules

The Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction. When required for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

11.5.2 Security Arrangements

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees shall at all times be provided with fulltime supervision while on site. The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period.

If not already tasked to the H&S Officer appointed in terms of Construction Regulation 6(6), the Principal Contractor must appoint a competent Emergency Controller who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments. These must include a monthly practice/testing program for the plans

11.6 Training

The Principal Contractor shall ensure that all employees under the his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Principal Contractor shall ensure that all labourers are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Principal Contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

No Principal Contractor shall allow or permit any employee to enter any site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

The Principal Contractor shall ensure that all visitors to a construction site undergoes health and safety instruction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment: Provided that where visits are made only to the site office which is not in direct contact with the construction work activities, those health and safety instructions and the provision of personal protective equipment may not apply.

The contents and syllabi of all training required by the Act and Regulations including any other related or relevant training as required must be included in the Principal Contractor's Health and Safety Plan and Health and Safety File.

11.6.1 General Induction Training

The Principal contractor must ensure that the employees on site are conversant with the general health and safety requirements on site. All employees of the Principal and other Contractors must be in possession of proof of General Induction training.

11.6.2 Site Specific Induction Training

All employees of the Principal and other Contractors must be in possession of Site Specific Occupational Health and Safety Induction or other qualifying training.

11.6.3 Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training. All employees in jobs requiring training in terms of the Act and Regulations must be in possession of valid proof of training as follows:

- General Induction (Section 8 of the Act)
- Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- Site/Project Manager
- Construction Supervisor
- OH&S Representatives (Section 18 (3) of the Act)
- Training of the Appointees indicated in 12.6.1 & 12.6.2 above
- Operation of Cranes (Driven Machinery Regulations 18 (11))
- Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)

- Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 27)
- As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3)
- Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- Emergency, Security and Fire Coordinator

11.7 Accident and Incident Investigation

The Principal Contractor is responsible to oversee the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to receive first aid or be referred for medical treatment by a doctor, hospital or clinic, (General Administrative Regulation 9). The Principal Contractor is responsible for the investigation of all non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar incidents in future.

The Principal Contractor is responsible for the investigation of all road traffic accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future. Notwithstanding the requirements of Section 24 of the Act, ALL incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

11.8 H&S Representatives and H&S Committees

11.8.1 Designation of H&S Representatives

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one H&S Representatives for every 20 employees or part thereof. (Section 17 of the Act and General Administrative Regulation 6. & 7.) H&S Representatives have to be designated in writing and the designation shall be in accordance with the Collective Agreement as concluded between the parties as is required in terms of General Administration Regulation 6.

11.8.2 Duties and Functions of the H&S Representatives

The Principal Contractor must ensure that the designated H&S Representatives conduct at least a weekly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor, after which these reports shall be consolidated for submission to the Health and Safety Committee. H&S Representatives must be included in and be part of accident/incident investigations. H&S Representatives shall be members of at least one H&S Committee and must attend all meetings of that H&S committee.

11.8.3 Establishment of H&S Committee(s)

The Principal Contractor must establish H&S Committees consisting of designated H&S Representatives together with a number of Employers Representatives appointed as per Section 19(3) that are not allowed to exceed the number of H&S Representatives on the committee. The persons nominated by the employer on an H&S Committee must be designated in writing for such period as may be determined by the project period. The H&S Committee shall co-opt advisory (temporary) members and determine the procedures of the meetings including the chairmanship.

12. HOUSE KEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 25. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in production. Good housekeeping will enhance production time.

Particular emphasis is to be placed on the following crucial elements of a construction site:

- Phase priorities and production/plant layout
- Enclosures

- Pits, openings and shoring
- Storage facilities
- Effective, sufficient and maintained lighting or illumination
- Principal sources of injuries e.g. stairways, runways, ramps, loose building material
- Oil, grease, water, waste, rubble, glass, storm water
- Colour coding
- Demarcations
- Pollution
- Waste disposal
- Ablution and hygiene facilities
- First aid disposals
- Hazardous chemical substances

This list must not be taken to be exclusive or exhaustive.

In promotion of environmental control all waste, rubble, scrap etc, will be disposed of at a registered dumping site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied. Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

13. OPERATIONAL CONTROL

The Principal Contractor shall take reasonable steps to ensure that necessary control measures are taken to promote safe working environment during all operational works. Routine safety inspections shall be carried out to ensure plant; machinery and tools are safe enough for employees to work with. Operational control measures shall be taken for the following activities and plant or machinery where applicable:

- Fall protection;
- Excavation work;
- Scaffolding;
- Mobile plants;
- Electrical installation and machinery; and
- Other associated activities.

14. SUB CONTRACTORS

The Principal Contractor shall ensure that agreements are entered into by all sub-contractors on site, and ensure that all sub-contractors are in compliance with the health and safety standards on site. Particulars of sub-contractors involved in specialised work such as blasting, concrete works and electrical installations must be submitted to the designers for approval and their safety plans submitted to the Client for approval.

15. OFFENCES AND PENALTIES

Any contractor, who does not comply with the requirements of the Act, will be penalised or punished as per Section 38 of the Act. The principal contractor must also note that the Client may stop the execution of construction work if it is not in accordance with the health and safety plan or if it poses a threat on the health and safety of employees and the public.



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C7. Site Information

7.1 General

This section describes the site at the time of the tender in order to enable the tenderer to price his tender accordingly and to decide upon his method of working, programming and risks.

The tenderer shall inform him / herself on the nature of the site and inspect the site.

The Employer will consider a tender only if the site inspection and/or tenderer's meeting arranged by the Engineer has been attended by a representative who must:

- Be suitably qualified to comprehend the implications of the work involved, and
- Be the tenderer him/herself or a person in the direct employ of the tenderer

7.2 Site location

The area is situated in Ledwaba (Mmakotse Extension), Mmakotse, Motantanyane and Hwereleng villages approximately 60km North East of Polokwane, adjacent to Lebowakgomo Township, and is part of Capricorn District Municipality in the jurisdiction of Capricorn District Municipality of Limpopo Province with the following coordinates:

Village Name	Co - ordinates	
	Latitude (S)	Longitude (E)
Hwereleng	-24.356575°	29.457426°
Mmakotse	-24.326385°	29.436148°
Ledwaba (Mmakotse Extension)	-24.309314°	29.434885°
Motantanyane	-24.336902°	29.430270°

Locality Details

- Province : Limpopo Province
- District : Capricorn District Municipality
- Municipality : Capricorn District Municipality

The mean annual temperature ranges between 4°C and 23°C in winter and 20°C and 37°C in summer. Maximum temperatures are usually experienced between October and January and minimum temperatures occur on average in June and July. The rainfall occurs mainly in the summer, mostly between the months of September and March, and an average rainfall of 500mm - 800 mm per annum.

7.3 Access to site and restrictions

Access to this villages is along R518 road to Zebediela. The construction sites are situated in the existing villages as mentioned in 7.2 above. These sites can be reached via existing streets/roads and Provincial Roads.

The operation of construction vehicles on existing roads or streets, or on streets which have been completed on the level of sub-base or base or bituminous surface treatment, shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof. Hauling is strictly forbidden on sections of streets that have been completed as described above. The Contractor shall make use of temporary haul roads, or where not practically possible, program his work in such a manner that the haulage of materials shall be restricted to that required for the particular section of street. No additional payment shall be made for the use of temporary haul roads and all relevant costs shall be deemed to be covered by the appropriate rates.

The Contractor must note that no additional payment will be made for the construction of temporary access roads to the construction site, borrow-areas or to the spoil sites, except for payment made under payment item A.8.3.2.2 of SABS 1200 A.

If the Contractor does not make use of existing streets for the hauling of materials to or from the site, he shall be held responsible to clear any spillage caused by his activities on or near the roads by whatever means necessary, within two (2) days after such spillage has occurred. No additional payment will be made for the clearance of spillage and all relevant costs will be deemed to be covered under the relevant items.

7.4 Existing services, servitudes and way leaves

All the known existing services are indicated on the drawings.

7.5 Security

The security of the Contractor's plant, employers, materials and site camp will be the Contractor's responsibility.

7.6 Nature of ground and subsoil conditions

The Contractor shall familiarize himself with the conditions on site.

The materials on site mainly consist of soft and hard material. The majority of excavation will be in weathered and hard granite.

Also refer to the Project Specification "*PS 4 : NATURE OF GROUND AND SUBSOIL CONDITIONS ON SITE*".



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C.8 Drawings

The following drawings, for tender purposes only, form part of this contract.

<u>DRAWING No:</u>	<u>DESCRIPTION:</u>	<u>ISSUED FOR:</u>
STRWS/GN-00	: General Notes	Tender
STRWS/SR-01	: General Arrangement Details	Tender
STRWS/SR-02	: Typical Details	Tender
STRWS/SR-03	: Concrete Palisade Fence Details	Tender
STRWS/SR-04	: Details of Valves/ Overflow Chamber	Tender
STRWS/SR-05	: Roof Slab Bottom Reinforcement	Tender
STRWS/SR-06	: Roof Slab Top Reinforcement	Tender
STRWS/SR-07	: Wall & Column Reinforcement Layout	Tender
STRWS/SR-08	: Flow Slab Reinforcement Layout	Tender
STRWS/SR-09	: Chamber and Pipe Details	Tender
STRWS/SR-10	: Inner Ladder & Chamber Details	Tender