ERWAT
EXCELLENCE IN WATER CARE

CIDB 8ME OR HIGHER

PROJECT NO: ERW2610/05

PUBLISH DATE: WEDNESDAY, 11TH NOVEMBER 2026

DESCRIPTION: THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

DEPARTMENT: INFRASTRUCTURE PLANNING AND PROJECTS

COMPULSORY VIRTUAL BRIEFING SESSION: 20TH NOVEMBER *2026 @ 10H30*

(Kindly visit the ERWAT Procurement portal to access the virtual link to register and connect)

CLOSING DATE: FRIDAY, 11TH DECEMBER *2026 @ 12:00*

FULL NAME OF BIDDER:
(Bidding Entity: cc, (Pty) Ltd, JV, Sole Proprietor, etc.) : _____

CONTACT PERSON : _____

TEL NUMBER : _____

EMAIL : _____

CIDB REGISTRATION NO. : CRS_____

CENTRAL SUPPLIER DATABASE REG NO. : M_____

BID AMOUNT (VAT INCLUSIVE) : **RATE BASED TENDER**

ERWAT STAMP

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

ERWAT
EXCELLENCE IN WATER CARE

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

CONTENTS

THE TENDER

Part T1: Bidding Procedures
T1.1 Tender notice and invitation to Tender
T1.2 Tender Data

Part T2: Returnable Documents
T2.1 List of returnable documents
T2.2 Returnable schedules

THE CONTRACT

Part C1: 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
C1.5 Corporate Governance Breach Clause

Part C2: Pricing Data
C2.1 Pricing Instructions
C2.2 Bill of Quantities

Part C3: Scope of Work
C3 Scope of Works

ERWAT
EXCELLENCE IN WATER CARE

T1.1 REQUEST FOR PROPOSAL NOTICE AND INVITATION

TENDER NOTICE

Bidders are hereby invited to submit tender offers for the project listed below:

Project No.	Project Description	CIDB Grading	Contact	Compulsory virtual Briefing Session Date	Closing Date
ERW2610/05	THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS	8ME OR HIGHER	MR. W MANGANYI 011 929 7000	**Friday, 20th November 2026 at 10h30** Note: Kindly register to attend the briefing session	**Friday, 11th December 2026 at 12h00**

Potential bidders may download the bid document from the ERWAT tender site free of charge. Bidders must however note that it remains their responsibility to print the full document and any omissions submitted due to not printing the full tender document may result in your bid being null and void. Bidders may not alter the downloaded document in any form what so-ever.

Compulsory virtual briefing session date and time. *Kindly refer to Clause F.2.7 of the bidding document relating to the Clarification Meeting (provisions for attending briefing sessions).*

Completed Tenders in ink and clearly marked ***"Bid No.: ERW2610/05 THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS*** must be placed in the Tender Box, ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein/ Bronkhorstspruit), Kempton Park, not later than **12:00 noon on Friday, 11th December 2026** at which hour and date the Tenders will be opened in public at ERWAT Head Office. Tenders shall remain valid for a period of 120 days from closing date and no late, faxed, e-mailed or other form of Tender will be accepted.

***All SCM Enquiries shall be addressed to chantel.kearns@erwat.co.za or Phumzile.mdlalose@erwat.co.za or Inkosinathi.nhlapo@erwat.co.za and* All Technical Enquiries shall be addressed to Mr. Wilson Manganyi at wilson.manganyi@erwat.co.za**

Bids will be evaluated in terms of ERWAT' Supply Chain Management Policy, the MFMA SCM Regulations, the Preferential Procurement Policy Framework Act and its Regulations, 2022, the General Conditions of Contract for construction (GCC) and, if applicable, any other special conditions of contract.

"The Special Conditions of Contract are supplementary to that of the General Conditions of Contract. In the event of any contradiction between the GCC or any other applicable contractual agreement, the Municipal Financial Management Act and its applicable regulations will take precedence."

NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (as defined in Regulation 44 of the Local Government: Municipal Supply Chain Management Regulations).

ERWAT accepts no responsibility for bidders accessing the tender notices from other sites/sources other than the newspapers used, its website (www.erwat.co.za/procurement) and the National Treasury's e-tender portal (www.etenders.gov.za).

WEDNESDAY, 11TH NOVEMBER 2026 (date of advert is available on the website and advertised)

ERWAT
EXCELLENCE IN WATER CARE

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

T1.2 TENDER DATA

General

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. See www.cidb.org.za which is reproduced without amendment or alteration for the convenience of Bidders as an Annex to this Tender Data.

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

The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender.

Clause No.	TENDER DATA
F1.1	**The Employer is:** Ekurhuleni Water Care Company (ERWAT) Hartebeestfontein Office Park R25 (Bapsfontein/Bronkhorstspruit Road) Kempton Park
F1.2	**The Tender document's contents is as follows:** **<u>THE TENDER</u>** **Part T1: Tender Procedures (Pink)** T1.1 Tender notice and invitation to Tender T1.2 Tender Data

	Part T2: Returnable Documents (Pink) T2.1 List of returnable documents T2.2 Returnable schedules **<u>THE CONTRACT</u>** **Part C1: Agreements and Contract Data (Yellow)** C1.1 Form of Offer and Acceptance C1.2 Contract Data C1.3 Form of Guarantee C1.4 Occupational Health and Safety C1.5 Corporate Governance Breach Clause **Part C2: Pricing Data (Yellow)** C2.1 Pricing Instructions C2.2 Bill of Quantities **Part C3: Scope of Work (Blue)** C3.1 Description of Works C3.2 Engineering C3.3 Construction C3.4 Management of Works C3.5 Health and Safety C3.6 Environmental Management During Construction
F1.3	**Interpretation** The Tender data and additional requirements contained in the Tender schedules that are included in the returnable documents are deemed to be part of these Tender conditions.
F1.4	**The Employer's Representatives are:** **<u>SCM:</u>** **Chantel Kearns/ Phumzile Mdlalose/ Inkosinathi Nhlapo - 011 929-7000** E-mail Address: chantel.kearns@erwat.co.za or Phumzile.mdlalose@erwat.co.za or Inkosinathi.nhlapo@erwat.co.za **<u>Technical:</u>** Wilson Manganyi **- 011 929 7000** E-mail Address: Wilson.manganyi@erwat.co.za Attention is drawn to the fact that verbal communication given by the Employer's representative prior to the close of Request for Proposals (Tender) will not be regarded as binding on the employer. Only information issued formally by the employer in writing to the bidders, under the signature of the Accounting Officer or his nominee will be regarded as amending the Tender documents. Tender offer communicated on paper shall be submitted as an original. In the event that no correspondence or communication is received from ERWAT within one hundred and twenty (120) days after the stipulated closing date and time of the Tender, the Tender proposal will be deemed to be unsuccessful.

F1.5	**Reject or Accept** The Employer may accept or reject any variation, deviation, Tender offer, or alternative Tender offer, and may cancel the Tender process and reject all Tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a bidder for such a cancellation and rejection, but will give written reasons for such action upon written request to do so.
F1.6:	**Appointment of Multiple Bidders** ERWAT reserves the right to award this contract to one or more bidders. The lowest bidder or any bid will not necessarily be accepted. The intention of ERWAT is to appoint a Minimum of One (1) bidder up to and a Maximum of two (2) Bidders for this Framework Contract. The decision to appoint multiple bidders will be based on the evaluation of bids received, the nature and scope of the work, and the Company's discretion to ensure optimal project delivery.
F2.1	**CIDB Requirements** 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 tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a (**8 ME or Higher class)** of construction work, are eligible to have their tenders evaluated. Furthermore, the contractor grading designations (**8 ME or Higher class)** for construction works taking place over an agreed number of years (36 Months) shall be based on the entire contract value where such work is: • on an "as and when required" basis Joint ventures are eligible to submit tenders provided that: 1. Every member of the joint venture is registered with the CIDB: 2. The lead partner has a contractor grading designation in the **8 ME 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 tendered for an **8 ME or Higher Class** of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. 4. The bulk of the work for this Contract is **Mechanical,** however it may also include civil, electrical , process and control & instrumentation aspects. Should these portions be sub-contracted, each Sub-Contractor shall have a sufficient CIDB grading in their field to cover their portion of the Contract price. An indication of the portion of the total Contract price allocated to each Sub-Contractor as well as proof of each Sub-Contractors CIDB grading shall be included in the Bidders submissions.
F2.2	**Cost of Bidding** Accept that the Employer will not compensate the Bidders for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

<table>
<tr><td>F2.3</td><td>Check documents

The Bidder shall satisfy himself that the set of tender documents is complete and in accordance with the index. If any page has been omitted or duplicated, or if the script or dimensions, or anything else in the tender document is indistinct, or if doubt exists as to the meaning of any description, or if the tender document contains any obvious errors, the Bidder shall immediately notify the Employer accordingly, in writing, so that such discrepancy or indistinctness can be clarified and rectified, as ERWAT or the Agent will not accept any responsibility or consider any claim in connection with such discrepancy or indistinctness, which are not rectified during the tender period.</td></tr>
<tr><td>F2.4</td><td>Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the Tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a proposal offer in response to the invitation.</td></tr>
<tr><td>F2.5</td><td>Reference Documents

Obtain, as necessary for submitting a tender 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 tender documents by reference.</td></tr>
<tr><td>F2.6</td><td>Acknowledge Addenda

Acknowledge receipt of addenda to the proposal documents, which the employer may issue, and if necessary apply for an extension of the closing time stated in the Tender data, in order to take the addenda into account.</td></tr>
<tr><td>F2.7</td><td>The arrangements for a compulsory Virtual briefing/clarification meeting are:
<table>
<tr><td>Date:
Friday, 20th November 2026 at 10h30</td><td>Online: Kindly register to attend the virtual compulsory briefing session at:
https://events.teams.microsoft.com/event/b8d73086-6f6e-4c53-8540-4d9533d5a4d1@1d9cdadc-ce7f-46d7-b303-e5c99a875dc2?source=copyLinkLegacyShareEventDialog

Kindly access the link through the ERWAT website.</td></tr>
</table>
Attendance of ERWAT Briefing Sessions

Bidders must take note of the provisions for site/briefing sessions as advertised in the media, ERWAT website and or on the e-tender portal.

In the event that a compulsory briefing session will be conducted, bidders must attend the session either on site or via virtual platform as indicated in the bid document and advertisement. Bidders will be given a link on the advert and tender document to register prior to the briefing session. On the day of the briefing session, bidders must log onto the link to attend. The virtual platform keeps record of bidders registered and in attendance.

Documents will only be accepted from bidders whose names appear on the attendance register. Failure to attend the compulsory briefing sessions and bidders whose names do not appear on the register, will render the bidder's submission invalid and will not be considered for evaluation.</td></tr>
</table>

	Kindly note that the company representative that attends this session will be accepted as a person with the relevant technical expertise applicable to this bid. Please list a minimum of one representative that attended the briefing session below. *Kindly indicate the company representative/s e-mail address who **attended** the briefing session:* *Name: _____* *Name:_____* *Email address:_____* *Email address: _____* *Contact number:_____* *Contact number:_____* *Kindly note that the above e-mail address/s will be utilised to verify your attendance at the compulsory briefing session conducted on Virtual or on-site. In the event that the indicated e-mail address/es cannot be traced on the physical attendance register; virtual registration and/or on-line attendance register, it will be taken that your company did not attend the briefing session and will result in your bid not being evaluated. It is the bidder's responsibility to provide correct e-mail address and/or contact details.* ***Joint Venture:*** *In the event that the bidding entity wishes to submit an offer as a joint venture, one or both company representatives must attend the briefing session.* *Kindly indicate above one or both representatives e-mail address who attended the briefing session.* Bidders are encouraged to collect/access bidding documents before the briefing session to allow them sufficient time to peruse the scope so that any queries can be dealt with at the briefing session. Bidders will be allowed five (5) working days from the date of the compulsory briefing session to direct queries to the SCM and End User department via e-mail. Where applicable, an addendum will be sent to the attending bidders with clarity on questions raised during these five (5) working days. A copy of the minutes will be attached thereto for ease reference. No individual should represent more than one bidder at the compulsory briefing session. At least one member of the JV be represented at the compulsory clarification meeting.
F2.8	**Seek clarification** Questions or queries must be submitted to the Employer at least five (5) working days before the stipulated closing date and time of the Tender. However, ERWAT shall not be liable nor assume liability for failure of the bidder to receive response to any questions and / or queries raised by the bidder by the closing time.
F2.9	**Pricing the Tender** State the rates and prices in South African Rand (ZAR). • Prices shall be FIXED and FIRM for the first 12 months of the Contract.
F2.10	**Alterations to documents** Bidder must not make any alterations or additions to the proposal documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the bidder. All signatories to the Tender offer shall sign next to all such alterations. Erasures and the use of masking fluid are prohibited. Copies are not allowed, only original documents will be accepted.

F2.11	**Submitting a Tender offer** No late, faxed, emailed or other form of Tender will be accepted. Completed Tenders with attached documents, if any, must be submitted in Black ink in sealed envelopes and clearly marked: **"*CONTRACT NO ERW2610/05: THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS*** and must be placed in Tender Box at ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein / Bronkhorstspruit), Kempton Park. Accept that the tender submitted to the employer cannot be withdrawn or substituted. **No substitute tender offers will be considered**. All Tenders received by ERWAT will remain in the Company's possession. **A Special Request:** Bidders are required to submit the fully tender document and their priced Bill of Quantities (BOQ) in both hard copy (as part of the comprehensive tender document submission) and digital electronic format (Microsoft Excel file) to facilitate efficient evaluation. The hard copy BOQ submitted with the tender documents will take precedence over digital electronic submission. Submission of the digital format is not mandatory, and failure to provide it will not lead to disqualification. However, providing digital excel priced BOQ is highly encouraged for smoother processing. Bidders may submit their tender document and priced Bill of Quantities (BOQ) in Microsoft Excel format via email to **TenderE-Submission@erwat.co.za**. The subject line of the email must clearly state the tender number, description and the name of the bidding entity.
F2.12	**Information and data to be completed in all respects** To facilitate review of this Tender by ERWAT, it is requested that submissions conform to the following format: 1. **Coversheet:** List Tender Statement, the name of your firm, and the name, address and telephone number of a contact person for questions concerning the Tender submitted. 2. **Executive Summary:** Provide a brief overview of the project, description of the overall approach to the project, key features of the technologies offered and an overview of the performance guaranteed. 3. **Relevant Experience and Reference Projects:** Information of similar sized projects completed by the Bidder (in South Africa and worldwide) using the specific technologies requested must be provided. The referenced projects must be comparable in size, complexity and performance achieved to the tendered project. Operation and maintenance experience must also be included here. 4. **Project Team:** Provide a project team organogram showing the structure and composition of the proposed team. A CV highlighting the relevant project specific experience for each team member must be supplied. Permanent staff and contracted staff must be distinguished.

	5. **Project Schedule:** A detailed project schedule must be submitted showing details with respect to the different phases of the project as well as the different aspects pertaining to engineering, procurement, construction, installation, commissioning and start up. The key milestones during the project must be indicated. 6. **Technical Specification & Datasheets**: All information asked for regarding the technical equipment shall be included here. Accept that Tender 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. Responsive Tenders are ONLY those Tenders with all documents and pages, contained herein, that have been signed by the responsible person duly authorised to sign all documents indicated on the returnable document **"FORM C Authority of Signatory".** The above is to be read in conjunction with F3.11 below as well as the Project Specifications detailed in Section C3: Scope of Works.
F2.13	**Closing time** **Closing Date: Friday, 11th December 2026** **Closing Time: 12h00 noon**
F2.14	**Tender offer validity** The Tender offer validity period is 120 Days.
F2.15	**Provide other information** **The bidders are required to submit following documents and if requested to resubmit in case if it was not initially submitted, it will result in automatic disqualification:** (1) Proof of SARS Tax status (pin issued by the South African Revenue Services); (2) Completion of MBD 1, 2, 3.2, 4, 5, 6.1, 8 and 9 forms **The following information will be verified with the returnable schedule:** a. Submission of a valid SARS pin to validate Tax compliance status; b. An updated record of payment of rates and taxes (not older than three months) and services to the relevant Municipality must be attached for the bidding company and all its directors. **The following cases will be reviewed and assessed where applicable.** (i) Where the bidder or any director/member leases premises and municipal accounts are not in their name, a valid lease agreement with a SAPS Affidavit clearly stating that the bidder or any Director/Member does not receive rates and taxes. (ii) Bidders that are residing in Traditional lands must attach a recent letter from the Tribal Authority falling within the bid period together with the SAPS Affidavit clearly stating that the bidder does not pay rates and taxes. (iii) If the company have directors that are spouses, with the same surname, address in the CK and CSD and the rates and taxes only specify one spouse, the rates and taxes will be sufficient. If they are leasing refer to (i) (iv) If the company have directors that are spouses, with the different surname and the rates and taxes only specify one spouse, you will be required to submit a certified copy of the marriage certificate.

	d. Completed and signed MBD forms as provided for in the returnable schedule (excluding MBD 7). e. In case of Joint Venture, Consortium, Trust, or Partnership a Valid Tax Clearance Certificate and/or SARS issued pin code (which will be verified) for both companies must be submitted. f. In case of Joint Venture, Consortium, Trust, or Partnership, a signed teaming agreement must be submitted.
F2.16	**Certificates** The Bidder is required to submit with his Tender a letter of intent from an approved insurer undertaking to provide the Performance Guarantee to the format included in Part C1.3 of this Tender Document.
F3.1	**Opening of tender** Tenders will be opened in public at the ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein / Bronkhorstspruit), Kempton Park.
F3.2	**Two-envelope System** A two-envelope procedure will **NOT** be followed.
F3.3	**Non-disclosure** After the opening of the Tender offers, no information relating to the clarification, determination of responsiveness, evaluation and comparison of Tender offers and recommendations concerning the award of the Tender shall be disclosed to any other Bidder or persons not concerned with such process until the award of the Tender has been announced by ERWAT.
F3.4	**Arithmetical errors, omissions and discrepancies** ERWAT is to check BID offers for arithmetical errors in the following manner: a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern. b) If bills of quantities or pricing schedules 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 shall be corrected. c) 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 bills of quantities apply) to achieve the tendered total of the prices. Consider the rejection of a tender offer if the Bidder does not correct or accept the correction of the arithmetical error in the manner described above.
F3.5	**1. Evaluation of tender offers** The Bidder's notice is drawn to the fact that the evaluation, adjudication and awarding of this Tender will be in terms of the Supply Chain Management Policy of ERWAT and the

Preferential Procurement Regulations of 2022.

If the submitted Tender does not comply with the Tender conditions, the Tender may be rejected. If specifications are not met, the Tender may also be rejected. With regard to the above, certain actions or errors are unacceptable, and warrant **REJECTION OF THE TENDER,** for example:

- Proof of SARS Tax status (pin issued by the South African Revenue Services);
- Non submission of company registration certificates.
- Pages that were to be completed being removed from the Tender document and have therefore not been submitted.
- Failure to fully complete form of offer.
- Scratching out without initialling next to the amended rates or information.
- Writing over / painting out rates / the use of Tippex/correction fluid or any erasable ink.
- Failure to attend compulsory briefing meetings
- The Tender has not been properly signed by a party having the authority to do so, according to the **Form C– "Authority for Signatory".**
- No authority for signatory submitted.
- Particulars required in respect of the proposal have not been provided: non- compliance of Tender requirements and/or specifications.
- The Bidder's attempts to influence or has in fact influenced the evaluation and/or awarding of the contract.
- The Proposal has been submitted after the relevant closing date and time.
- If any municipal rates and taxes or municipal service charges owed by that Bidder or any of its directors to the company, or to any other company or municipal entity, are in arrears for more than three months (90 days).
- If any Bidder who during the last five years has failed to perform satisfactorily on a previous contract with the company or any other organ of state after written notice was given to that Bidder that performance was unsatisfactory.

2. Good standing with SA Revenue Services

- Determine whether the bidders tax matters are in order as provided for by SARS.
- The Bidder must complete the MBD 2 form in the returnable schedule and or attach their valid SARS Pin to verify their Tax matters to the designated page of the Tender document.

If the Tender does not meet the requirements contained in the ERWAT Supply Chain Policy, and the mentioned framework, it will be rejected and may not subsequently be made acceptable by correction or withdrawal of the non-conforming deviation or reservation.

3. Penalties

ERWAT will, if upon investigation it is found that a preference in terms of the Preferential Procurement Policy Framework Act, 2000 and these regulations has been obtained on a fraudulent basis, or any specified goals are not attained in the performance of the contract, one or more of the following penalties will be imposed:

- Cancel the contract and recover all losses or damages incurred or sustained from the Bidder.
- Impose a financial penalty of twice the theoretical financial preference associated with the claim, which was made in the Tender.
- Restrict the firm, its shareholders and directors on obtaining any business from ERWAT for a period of 5 years and blacklisted on the National Treasury database of restricted suppliers.

4. Evaluation Criteria

ERWAT will establish a Bid Evaluation Committee (BEC) whose responsibility it is to make recommendations to the Bid Adjudication Committee (BAC). The Bid Evaluation Committee will short list and evaluate the bid document in accordance with the criteria below and make recommendations to the BAC.

	1) Pre compliance evaluation to be done and pre-qualified bidders goes through for the functionality evaluation. Where some pre compliance information is not provided the ERWAT supply chain will contact the responsible bidder to submit within 5 working days and failure to do so will result in disqualification. 2) Score Bid evaluation points for price and preference points 3) Calculate total Bid evaluation points, to two decimal places 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.
	FUNCTIONALITY CRITERIA: - Note: The minimum required score for functionality is stipulated in the functionality table listed elsewhere in the document. Bidders scoring less than the stipulated threshold on functionality shall not proceed to the next stage of the evaluation. Functionality criteria maximum points in respect of each criterion shall be as set out at the bottom of this table. All Tender submission will be evaluated by at least three evaluators against the Table below. Bidders shall ensure that their tender submissions are sufficiently detailed and that all required information is included in their submissions. Information not provided will result in zero points awarded for the respective item. **Tender evaluation points** Tender evaluation points will be allocated as per the Supply Chain Management policy and the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2022 including the following: The points allocation for this Tender is: a) Price: 90 b) B-BBEE Status Level of Contribution: 10 Regulations of disputes, objections, complaints and queries will be handled in accordance with the GCC for construction works 2015.
F3.6	**Contract Documents** The Service Level Agreement (if applicable), Bid document and related attachments shall constitute the complete contract agreement. It should be noted that all ERWAT contracts are subject to the Municipal Financial Management Act (MFMA Act 56 of 2003), therefore in the event that there is any contradiction between the MFMA (*Act 56 of 2003*) and the GCC or any other applicable contractual agreement, the MFMA (*Act 56 of 2003*) and its applicable regulations shall take precedence.

	This is a CIDB Contract, and the CIDB Board has initiated a B.U.I.L.D Programme which focuses on Targeted Enterprise Development and/or Skills Development. This contract is affected by CIDB B.U.I.L.D Programme for Skills Development, therefore, the CIDB standard for Developing Skills through Infrastructure Contracts (Government gazette 28 April 2023) which forms part of the B.U.I.L.D Programme Standards shall form part of the contract. This standard requirement as well as any other regulatory or legislative requirements will be included during the Service Level Agreement (SLA) stage.
F3.7	**Provide copies of the contracts** The number of paper copies of the signed contract to be provided by the Employer is **one**.
Additional conditions	The additional conditions of the proposal are: 1) ERWAT may also request that the Bidder provide written evidence that his financial, labour and resources are adequate for carrying out the project. 2) ERWAT reserves the right to appoint a firm of chartered accountants and auditors and / or execute any other financial investigations on the financial resources of any Bidder. The Bidders shall provide all reasonable assistance in such investigations 3) ERWAT reserves the right to award this contract to one or more bidders. The lowest bidder or any bid will not necessarily be accepted. The intention of ERWAT is to appoint a Minimum of One (1) bidder up to a Maximum of two (2) Bidders for this Framework Contract. The decision to appoint multiple bidders will be based on the evaluation of bids received, the nature and scope of the work, and the Company's discretion to ensure optimal project delivery. 4) The number of bidders that will be appointed and the allocation of activities or items per bidder will be at ERWAT's discretion 5) The lowest bidding price will not necessarily be accepted and ERWAT reserves the right to determine market related rate to be offered to the successful bidders. 6) The rates of the highest-scoring bidder, subject to market evaluation (market related rate), will be offered to the **subsequent qualifying bidders based on tender specification.** 7) If the tender is found to be unauthorised, fruitless and wasteful or irregular as informed through a formal investigation, internal and or external audit outcome, the Auditor General, Council, ERWAT Board of Directors or National Treasury, ERWAT reserves the right to cancel the tender with immediate effect and the bidder will have no claim to his effect whatsoever. The final terms of payment (where applicable) will be negotiated with the bidder at the time for final close out of the contract.

1.1 FUNCTIONALITY EVALUATION

Potential service providers will have to achieve a minimum of **80 points out of 100** for their technical proposals before their financial proposals and B-BBEE status are evaluated. This is required so that there is a level of comfort that the potential service provider can deliver the project with the required professionalism and quality.

1.1.1 SCORING PROCESS

The Technical / Functional Evaluation Task Team will be established to determine the following:

- Whether or not the Bidder understood the project specifications.
- The bidders experience with similar projects.
- The qualifications and experience of the key staff proposed.
- Bidder's financial capacity, and
- Bidder's support from the OEM

No alteration of functionality proposals will be permitted after the deadline for receipt of bids. Questions may be asked for clarification needed to evaluate their proposals, but bidders would not be permitted to change the substance or price of their bids after bid opening. Requests for clarification and the bidder's responses would be made in writing. No interviews will be conducted in this regard.

NB: ERWAT reserves the right to verify all supporting documents.

MANDATORY REQUIREMENTS

Scope Related Information and Documentation Required:		
Please ensure that the following supporting documents are attached to your Bid Document. Please note that bidders will not be evaluated further if they do not provide evidence confirming compliance with any of the specified mandatory requirements. ***ERWAT reserves the right to verify supporting documents.***		
Item	**Description**	**Supporting Evidence or Proof Sought**
1.	CIDB Rating of 8ME **Class or Higher Class**	Bidders shall submit proof of Current Registration. (at the time of submission, the document should be in good standing and not expired). ERWAT reserves the right to verify the validity of the submitted proof of evidence.

NB: Bidders who comply with the mandatory requirements will be considered for technical evaluation.

1.1.2 Workstream 1

SCORING CRITERIA FOR CIDB CONTRACTS:

The score for the Technical / Functionality Evaluation will be calculated in accordance with the table below

CRITERION	CRITERION DETAILS	POINTS
Expertise of key staff Certified copies of supporting qualifications and ECSA registration must be submitted. Bidders must complete the pro-forma Curriculum Vitae(s) forms in this document in full.	**Expertise of key staff** Experience of key staff will be evaluated based on the years/months post professional ECSA accreditation (registration Certificate date). **Mechanical Engineer: Project Manager Professionally Registered with ECSA Min. NQF Level 7** • 0 – 47 Months Experience = 0 • 48 - 59 Months Experience = 05 • 60 - or more Months experience = 10 **Chemical Engineer: Lead Process Engineer Professionally Registered with ECSA Min. NQF Level 7** • 0 – 47 Months Experience = 0 • 48 - 59 Months Experience = 05 • 60 - or more Months experience = 10 **Civil Engineer: Lead Civil Engineer Professionally Registered with ECSA Min. NQF Level 7** • 0 – 47 Months Experience = 0 • 48 - 59 Months Experience = 03 • 60 - or more Months experience = 05 **Electrical Engineer: Lead Electrical Engineer Professionally Registered with ECSA Min. NQF Level 7** 0 – 47 Months Experience = 0 48 - 59 Months Experience = 03 60 - or more Months experience = 05	**30**
Financial Capacity of Service Provider	The bidder shall submit a **bank guarantee of R10 million**, issued by a registered financial institution, as proof of adequate financial resources and capacity to undertake and successfully deliver the scope of works under the contract.	**20**

Letters of Support Only signed letter of support on the letterheads of the original equipment manufacturer or official supplier with a clear description of support services and contact person (day telephone number and company email address) will be accepted.	**Letter of support from Original Equipment Manufacturer (OEM) of Dewatering technologies** The letter shall be addressed to the bidder, and clearly stipulate that the manufacturer or Official Supplier of the Dewatering technologies will provide Installation and Operational Support for the equipment. Bidders may supply letters from the official suppliers, provided that the bidder provides an agreement between the official supplier and the Original Equipment Manufacturer. The Employer's primary objective is the appointment of a dewatering technology that effectively addresses its operational requirements. Each bidder will be required to make a detailed presentation outlining the key functional requirements that the proposed technology is expected to fulfil within the ERWAT WCWs. Compliance with this requirement is important, as it will form part of the technical evaluation and may influence the overall bid scoring.	**50**
TOTAL	**Bidder must score a minimum of 80 points to be considered for further evaluation**	**100**

ERWAT
EXCELLENCE IN WATER CARE

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

T 2.1 LIST OF RETURNABLE DOCUMENTS

1. Failure to fully complete and sign the relevant returnable documents shall render such a tender offer unresponsive.

2. Bidders shall note that their signatures appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided, including the information provided by candidates proposed for the specified key positions.

3. Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a Bidder. If subsequently any information is found to be incorrect such discovery shall be taken as will full misrepresentation by that Bidder to induce the contract. In such event the Employer has the discretionary right to terminate the contract.

THE BIDDER MUST COMPLETE AND SIGN THE FOLLOWING RETURNABLE SCHEDULES:

RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES

MBD 1	INVITATION TO BID
MBD 2	TAX CLEARANCE REQUIREMENTS
MBD 3.	PRICING STRUCTURE: NON-FIRM PRICES
MBD 4	DECLARATION OF INTEREST
MBD 5	DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)
MBD 6	PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022
MBD 7	CONTRACT FORM: PURCHASE OF GOODS/SERVICES
MBD 7.1	PART 1: TO BE COMPLETED BY THE BIDDER
MBD 7.2	PART 2: TO BE COMPLETED BY ERWAT
MBD 8	DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

MBD 9	CERTIFICATE OF INDEPENDENT BID DETERMINATION
FORM A	MUNICIPAL SERVICES, RATES AND TAXES OR RENTAL AGREEMENT WITH LANDLORD: **The following information will be verified with the returnable schedule:** c. Submission of a valid SARS pin to validate Tax compliance status; d. An updated record of payment of rates and taxes (not older than three months) and services to the relevant Municipality must be attached for the bidding company and all its directors. **The following cases will be reviewed and assessed where applicable.** (v) Where the bidder or any director/member leases premises and municipal accounts are not in their name, a valid lease agreement with a SAPS Affidavit clearly stating that the bidder or any Director/Member does not receive rates and taxes. (vi) Bidders that are residing in Traditional lands must attach a recent letter from the Tribal Authority falling within the bid period together with the SAPS Affidavit clearly stating that the bidder does not pay rates and taxes. (vii) If the company have directors that are spouses, with the same surname, address in the CK and CSD and the rates and taxes only specify one spouse, the rates and taxes will be sufficient. If they are leasing refer to (i) (viii) If the company have directors that are spouses, with the different surname and the rates and taxes only specify one spouse, you will be required to submit a certified copy of the marriage certificate. g. Completed and signed MBD forms as provided for in the returnable schedule (excluding MBD 7). h. In case of Joint Venture, Consortium, Trust, or Partnership a Valid Tax Clearance Certificate and/or SARS issued pin code (which will be verified) for both companies must be submitted. i. In case of Joint Venture, Consortium, Trust, or Partnership, a signed teaming agreement must be submitted.
FORM B	NATIONAL TREASURY CENTRALISED SUPPLIER DATABASE
FORM C	AUTHORITY OF SIGNATORY
FORM D	FINANCIAL REFERENCES /BIDDER'S CREDIT RATING AND BANK DETAILS
FORM E	RECORD OF ADDENDA TO TENDER DOCUMENTS
FORM F	CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85
FORM G	OCCUPATIONAL HEALTH AND SAFETY AGREEMENT
FORM H	CERTIFIED COPY OF ID DOCUMENT/S OF OWNERS/MEMBERS/SHAREHOLDERS
FORM I	CURRENT CERTIFICATE OF GOOD STANDING FROM COMPENSATION COMMISSIONER
FORM J	PROGRAM OF WORKS/SERVICES
FORM K	EXPERTISE OF THE KEY PERSONNEL

FORM L	PROOF OF RELEVANT REGULATORY CERTIFICATION OR OTHER REQUIREMENTS IN TERMS OF THE REQUIRED REGULATORY AUTHORITY AS SET OUT IN THE SCOPE OF WORKS
FORM M	LETTER OF INTENT TO SUBMIT THIRD PARTY LIABILITY INSURANCE AND ALL RISK CONTRACTORS' INSURANCE TO COVER THIS CONTRACT
FORM N	COPY OF COMPANY REGISTRATION DOCUMENTS
FROM O	BACKGROUND AND WORK EXPERIENCE
FROM P	PROTECTION OF PERSONAL INFORMATION ACT, 4 OF 2013

Returnable Documents that will be incorporated into the contract

C1.1	OFFER PORTION OF FORM OF OFFER AND ACCEPTANCE
C1.2	CONTRACT DATA (PART 2)
C1.3	FORM OF GUARANTEE (THIRD PARTY LIABILITY AND ALL RISK INSURANCE)

T2.1.1 IMPORTANT: Required Returnable Documentation:

Please ensure that the following supporting documents are attached to your Bid Document. Evaluation of these submissions will be done based on the MFMA requirements.

Item	Description of Document/Proof Sought	**To be completed by the Bidder** on submission of documents: Please fill in **"Yes" or "No"**	**For Office Use Only** Verified by SCM Official: Please fill in **"Yes" or "No"**
1	A valid Tax Clearance Certificate/SARS issued pin		
2	Copy of ID documents of owners/ members/ shareholders (see Bidders Information Section).		
3	**The following information will be verified with the returnable schedule:** • Submission of a valid SARS pin to validate Tax compliance status; • An updated record of payment of rates and taxes (not older than three months) and services to the relevant Municipality must be attached for the bidding company and all its directors. **The following cases will be reviewed and assessed where applicable.** • Where the bidder or any director/member leases premises and municipal accounts are not in their name, a valid lease agreement with a SAPS Affidavit clearly stating that the bidder or any Director/Member does not receive rates and taxes. • Bidders that are residing in Traditional lands must attach a recent letter from the Tribal Authority falling within the bid period together with the SAPS Affidavit clearly stating that the bidder does not pay rates and taxes. • If the company have directors that are spouses, with the same surname, address in the CK and CSD and the rates and taxes only specify one spouse, the rates and taxes will be sufficient. If they are leasing refer to (i) • If the company have directors that are spouses, with the different surname and the rates and taxes only specify one spouse, you will be required to submit a certified copy of the marriage certificate. • Completed and signed MBD forms as provided for in the returnable schedule (excluding MBD 7).		

	• In case of Joint Venture, Consortium, Trust, or Partnership a Valid Tax Clearance Certificate and/or SARS issued pin code (which will be verified) for both companies must be submitted. • In case of Joint Venture, Consortium, Trust, or Partnership, a signed teaming agreement must be submitted.		
4	Current Certificate of Good Standing from Compensation Commissioner		

T2.1.2 Other Returnable Documents required for the evaluation

Please ensure that the following supporting documents are attached to your Bid Document. Evaluation of these submissions will be done based on the MFMA requirements

Item	**Description of Document/Proof Sought**	**To be completed by the Bidder** on submission of documents: Please fill in **"Yes" or "No"**	**For Office Use Only** Verified by SCM Official: Please fill in **"Yes" or "No"**
1.	Copy of Company/ Registration Documents (see Bidders Information Section).		
2.	Copy of B-BBEE Verification certificate from an accredited Verification Agency or BBBEE Affidavit signed by Commissioner of Oaths, as provisioned in the B-BBEE Act and its Regulations.		
3.	Proof of CSD registration (Supplier number and unique reference ID).		
4.	Proof of CIDB		

ERWAT
EXCELLENCE IN WATER CARE

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

T2.2 RETURNABLE SCHEDULES

MBD 1

PART A
INVITATION TO BID

You are hereby invited to bid for requirements of ERWAT	
Bid Number	ERW2610/05
Compulsory Briefing session date and time. *Kindly refer to Clause F.2.7 of the bidding document relating to the Clarification Meeting (provisions for attending briefing sessions)*	A Compulsory Briefing Session will be held via Microsoft Webinar on **Friday, 20th November 2026 at 10h30** – Registration Required **Registration Link**: https://events.teams.microsoft.com/event/b8d73086-6f6e-4c53-8540-4d9533d5a4d1@1d9cdadc-ce7f-46d7-b303-e5c99a875dc2?source=copyLinkLegacyShareEventDialog **Kindly access the link from the ERWAT website**.
Closing date	**FRIDAY, 11TH DECEMBER 2026**
Closing time and venue	12h00 noon at ERWAT Head Office, R25 Bapsfontein Road, Norkem Park
VIRTUAL BRIEFING SESSIONS	BIDDERS ARE REQUIRED TO REGISTER TO ATTEND A BRIEFING SESSION HELD THROUGH A VIRTUAL PLATFORM. BIDDERS MUST ACCESS THE LINK FROM THE ERWAT WEBSITE **ONLY** TO REGISTER AND ATTEND THE VIRTUAL BRIEFING SESSIONS. ONCE BIDDERS HAVE REGISTERED, THEY WILL RECEIVE A CONFIRMATION IN THEIR REGISTERED E-MAIL. KINDLY FOLLOW THE INSTRUCTIONS FROM THAT E-MAIL. **DO NOT** COPY THE LINK FROM THE BID DOCUMENT OR THE ADVERTISEMENT OR FROM THE E-TENDER PORTAL, AS THIS WILL NOT ALLOW YOU ACCESS. KINDLY REGISTER IN ADVANCE (AT LEAST ONE DAY BEFORE THE BRIEFING SESSION) TO ENSURE BIDDERS CAN ACCESS THE LINK AND TO REPORT ANY CHALLENGES **BEFORE** THE BRIEFING SESSION TO THE CONTACT PERSON STIPULATED IN THE BID DOCUMENT.
Submission of bid documents	All tender submissions must be provided in hardcopy format on the original bid document as supplied by ERWAT and deposited in the tender box. In addition to the hardcopy, bidders are requested to submit an identical electronic copy (in PDF format) of the complete tender document via email to **TenderE-Submission@erwat.co.za**. The email must clearly state the tender reference number and the bidder's name in the subject line. The electronic submission must be made by the tender closing date and time. While submission to **TenderE-Submission@erwat.co.za** is not mandatory, bidders are encouraged to do so to assist with the efficient evaluation of bids. Bidders will not be disqualified for not submitting an electronic copy. Both the hardcopy and electronic versions must be identical in every detail, including all completed forms, signed declarations, schedules, and supporting documentation. In the event of any discrepancies between the hardcopy and the electronic copy, the hardcopy version will be considered the official and legally binding submission. Bidders are therefore responsible for ensuring that the contents of both formats are complete, consistent, and fully aligned.
The successful bidder will be required to fill in and sign a written contract form (MBD7).	

Bidder Information	
Name of Bidding Company	
Company physical address	
Company postal address	
Contact details	Company Representative (Name):
	Telephone:
	Cell phone:
	E-mail address:
National Treasury Central Supplier Database number: (Compulsory)	MAAA
CIDB Grading CRS number	
Vat registration number	
Tax Compliance status	TCS Pin:
Are you the accredited representative in South Africa for the goods/ services/ works offered? If yes, attach proof from the agency your company is accredited to represent	
Total number of items offered	N/A
Total price (including VAT)	R **All Tendered Rates**
SCM related enquiries:	**Chantel Kearns/ Phumzile Mdlalose/ Inkosinathi Nhlapo** E-mail Address: chantel.kearns@erwat.co.za or Phumzile.mdlalose@erwat.co.za or Inkosinathi.nhlapo@erwat.co.za Tel: 011 929 7000
Technical enquiries	Mr. Wilson Manganyi E-mail: wilson.manganyi@erwat.co.za Tel: 011 929 7000

PART B
TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.

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

1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS (GCC 2015, THIRD EDITION) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

2. TAX COMPLIANCE REQUIREMENTS

2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.

2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.

2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.

2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.

2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.

2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.

2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? ☐ YES ☐ NO

3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO

3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO

3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO

3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.

NB: Failure to provide any of the above particulars may result in your bid being disqualified.

Name & Surname of Representative: _____

Signature Of Bidder: _____

Capacity Under Which This Bid Is Signed: _____

Date: _____

MBD 2

TAX CLEARANCE CERTFICATE REQUIREMENT

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

NEED A TAX CLEARANCE? GO ONLINE

- Electronically request your Tax Compliance Status which will include a unique PIN which you can provide to any third party (if requested) to enable them to verify your tax compliance status online via e-Filing.
- Request a TCC via e-filing which will give you the option to print the TCC.
- Or request a TCC at a SARS branch where a SARS agent will be able to print or e-mail the TCC to you.
- To register for e-filing go to: www.sarsefiling.co.za

A tax compliant status is a holistic view of your tax compliance level across all your registered tax types.

Is your tax compliance status green?

- Ensure all tax returns are submitted
- No outstanding debt owed to SARS
- SARS has been notified of any change of residential or business address
- Your business is registered for all required tax types e.g. PAYE, VAT, income tax.

Check your tax compliance status by logging onto your e-filing profile and viewing your "my compliance Profile" and rectify any non-compliance.

THIRD PARTY AUTHORISATION TO VIEW BIDDER TCS:

To assist with the evaluation process of your bid we require your consent to check your SARS tax compliance via e-filing. Kindly complete the table below authorising MLM to check TCC for tender purposes only.

TCS Details	
Taxpayer name	
Trading Name	
Purpose of request	TENDER
Request Reference number	
PIN	
PIN EXPIRY DATE	

Note: Bidders may attach their Tax compliance status printout to the bidding document.

I, _____ in my capacity as _____ duly appointed as authorised signatory holder, hereby grant **ERWAT** permission to check the TCC status of _____ and it is duly understood that the search is for tender purposes only.

_____ _____

NAME AND SURNAME **DESIGNATION**

_____ _____

DATE **SIGNATURE**

FOR ERWAT OFFICE USE ONLY:

VERIFIED ☐**YES /** ☐**NO**

Contractor	***Witness 1***	***Witness 2***	***Employer***	***Witness 1***	***Witness 2***

MBD 3.2

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: **ERW2610/05**
Closing Time : **12:00 NOON**	Closing Date: **Friday, 11th December 2026**

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

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCUDED)
-		Required by:	**EKURHULENI WATER CARE WORKS**
-		At:	**INFRASTRUCTURE PROJECTS AND PLANNING**
-		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	Tot be determined at time of signing SLA
-		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 e.g. 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

MBD 3.2

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

MBD 4

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.

3. A Person who is an advisor or consultant contracted with the municipality.

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

4.1 Full Name of bidder or his or her representative:_____

4.2 Identity Number:

4.3 Position occupied in the Company (director, trustee, shareholder[2]):

_____

4.4 Company Registration Number: _____

4.5 Tax Reference Number: _____

4.6 VAT Registration Number: _____

4.7 The names of all directors / trustees / shareholder's members, their individual identity numbers and state employee numbers must be indicated in paragraph 5 below.

4.8 Are you presently in the service of the state?
YES / NO

If so, furnish particulars.

_____

_____

4.9 Have you been in the service of the state for the past twelve months?

YES / NO

If so, furnish particulars.

_____

_____

4.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?

YES / NO

If so, furnish particulars.

_____

_____

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

YES / NO

If so, furnish particulars.

_____

_____

4.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?

YES / NO

If so, furnish particulars.

_____

_____

4.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?

YES / NO

If so, furnish particulars.

_____

_____

4.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract? ***(This refers to all companies involved in, regardless of the commodity – please refer to the last page of the bidding companies CSD report that will show the MAAA numbers of the other active companies that Directors etc. have interest in).***

YES / NO

If so, furnish particulars.

_____

_____

5. Full details of directors / trustees / members / shareholders ***in the service of the state. * (refer to the section below the table for the definition of "in the service of the state)".***

FULL NAME	IDENTITY NUMBER	STATE EMPLOYEE NUMBER

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

(a) *A member of –*
- *any municipal council/entity;*
- *any provincial legislature; or*
- *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.*

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

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**

MBD 5

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.

Bidders are required to submit **audited** financial statements for the **past three years** for bids where the threshold exceeds R10 million ***if they are required to prepare annual financial statements for auditing by law.***

If your company is not required by law to submit audited financial statements; unaudited/reviewed financial statements will be accepted.

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

***YES/NO**

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***. All the AFS are signed off by a registered Chartered Accountant that is a Registered Auditor (e.g. IRBA registered).***

_____

_____

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?

***YES/NO**

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?

***YES/ NO**

3.1 If yes, furnish particulars

_____

_____

**** Delete if not applicable***

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

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**

MBD 6.1

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

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

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

---

1. GENERAL CONDITIONS

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

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

1.2 The 90/10 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received and shall be awarded for:

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

1.5 The maximum points for this tender are allocated as follows:

	POINTS
PRICE	**90**
SPECIFIC GOALS	**10**
Total points for Price and SPECIFIC GOALS	**100**

1.3 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.

1.4 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. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

2.1 **POINTS AWARDED FOR PRICE**

THE 90/10 PREFERENCE POINT SYSTEMS

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

90/10

$$Ps = 90\left(1 - \frac{Pt - Pmin}{Pmin}\right)$$

Where
Ps = Points scored for price of tender under consideration
Pt = Price of tender under consideration
Pmin = Price of lowest acceptable tender

3. POINTS AWARDED FOR SPECIFIC GOALS

3.1. 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:

Table 1: Specific goals for the tender and points claimed are indicated per the table below.
***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 (90/10 system)**	**Number of points claimed (90/10 system) (To be completed by the tenderer**
EME or QSE 51% owned by women	2	
EME or QSE 51% owned by youth	2	
EME or QSE 51% owned by people with disabilities	2	
EME or QSE 51% owned by military veterans	2	
EME or QSE within the boundaries of Ekurhuleni Municipality	2	

The above information will be verified in accordance with the bidders B-BBEE certificate, and or a certificate from the companies and intellectual property commission (CIPC), the department of Military Veterans and or other supporting documents. All supporting evidence must be submitted in order to claim the preferential procurement points claimed. ERWAT reserves the right to verify the information submitted.

In the case of multi-parties (Joint ventures, consortiums, partnerships, etc.), allocation of points will be calculated by adding the individual parties in the JV, etc. ownership % together; divide the total by the number of parties in the respective joint ventures, consortiums, partnerships, etc. The average % will thus be the indicating factor for the number of points to be scored.

EXAMPLE

Joint venture

Party 1 = 51% EME/QSE owned by women
Party 2 = 100% EME/QSE owned by women
= **151%** / 2 parties in the JV = 75% and will score = 2 points

The above principle will apply to points 1, 2, 3 & 4 indicated in Table 1 above.
For point 5: The collective JV agreement's address, or the Lead JV partners' domicile Address will be utilized for scoring of points.

DECLARATION WITH REGARD TO COMPANY/FIRM

3.2. Name of company/firm…….

3.3. Company registration number: ……...

3.4. 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]

3.5. 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: ……

MBD 7.1

CONTRACT FORM - PURCHASE OF GOODS/WORKS

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

PART 1 (TO BE FILLED IN BY THE BIDDER)

1. I hereby undertake to supply all or any of the goods and/or works described in the attached bidding documents to (name of institution)……..…… in accordance with the requirements and specifications stipulated in bid number **ERW2610/05** 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 time of 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);
   - Technical Specification(s);
   - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2022;
   - 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 goods and/or works 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. It is noted that this is rates-based tender. The contract is limited to Purchase orders issued within the available budget allocated for such on an as and when required basis.

6. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

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

NAME (PRINT)_____

CAPACITY _____

SIGNATURE _____

NAME OF FIRM _____

WITNESSES

1. _____

2. _____

DATE: _____

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

MBD 7.1

CONTRACT FORM - PURCHASE OF GOODS/WORKS

PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I…… in my capacity as……..…..

   accept your bid under reference number **ERW2610/05** dated……for the supply of goods/works indicated hereunder and/or further specified in the annexure(s).

2. An official order indicating delivery instructions is forthcoming.

3. I undertake to make payment for the goods/works delivered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice accompanied by the delivery note.

ITEM NO.	DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)
	Kindly refer to the BOQ*	***Kindly refer to the pricing schedule/BOQ****	***Determined in the Service Level Agreement***	***Refer to MBD 6.1***	***Refer to MBD 6.1***

**** It is noted that this is rate-based tender. The contract is limited to Purchase orders issued within the available budget allocated for such on an as and when required basis.***

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

NAME (PRINT)_____

CAPACITY _____

SIGNATURE _____

NAME OF FIRM _____

DATE _____

WITNESSES

1. _____

2. _____

DATE: _____

MBD 8

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 company'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. wilfully 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	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? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the *audi alteram partem* rule was applied). 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.	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	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)? 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.	Yes ☐	No ☐

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 ☐	No ☐
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the company / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes ☐	No ☐
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 ☐	No ☐
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME_____

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

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

_____

SIGNATURE ON BEHALF OF BIDDER

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

1. This Municipal Bidding Document (MBD) must form part of all bids[1] 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. take all reasonable steps to prevent such abuse;

    b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and

    c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

PROJECT NO: ERW2610/05

DESCRIPTION: THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

in response to the invitation for the bid made by:

EKURHULENI WATER CARE COMPANY (ERWAT)
(Name of Municipality/Entity)

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

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

1. I have read and I understand the contents of this Certificate;

2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;

3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;

4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;

5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:

   (a) has been requested to submit a bid in response to this bid invitation;

   (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and

   (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium[3] 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.

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 BID**

FORM A

MUNICIPAL SERVICES, RATES AND TAXES CLEARANCE CERTIFICATE FOR SUPPLY CHAIN MANAGEMENT PURPOSE

The following information will be verified with the returnable schedule:

a. An updated record of payment of rates and taxes (not older than three months) and services to the relevant Municipality must be attached for the bidding company and all its directors.

The following cases will be reviewed and assessed where applicable.

i. Where the bidder or any director/member leases premises and municipal accounts are not in their name, a valid lease agreement with a SAPS Affidavit must be submitted.
ii. Bidders that are residing in Traditional lands must attach a recent letter from the Tribal Authority falling within the bid period together with the SAPS Affidavit clearly stating that the bidder does not pay rates and taxes.
iii. If the company has directors that are spouses (with the same surname, address in the CK and CSD and the rates and taxes only specify one spouse the rates and taxes will be sufficient for both if submitted. If they are leasing refer to (i)

FORM B

CONFIRMATION OF REGISTRATION ON NATIONAL TREASURY CENTRALISED SUPPLIER DATABASE

CONFIRMATION OF CSD VENDOR INFORAMTION		
1	VENDOR NAME	
2	CSD APPROVED NUMBER	**M**_____
3	COMPANY REG NUMBER	
4	COMPANY TAX NUMBER	
5	COMPANY VAT NUMBER	
6	COMPANY BEE LEVEL	
7	CONTACT PERSON	
8	OFFICE TEL. NUMBER	
9	OFFICE FAX NUMBER	
10	E-MAIL ADDRESS	
11	CELL NUMBER	

I, _____ in my capacity as _____ being the authorized signatory, hereby declare that the above information is true and correct.

_____ _____

AUTHORISED SIGNATORY DESIGNATION **NAME AND SURNAME**

_____

RESOLUTION DATE: AUTHORISED SIGNATORY APPOINTMENT

_____ _____

SIGNATURE **DATE**

FORM C

AUTHORITY OF SIGNATORY TO SIGN BIDS

The bid shall be signed by a person duly authorised thereto and the following is applicable:

Company: A resolution by its board of directors authorising a director or other official of the company to sign the documents on behalf of the company.

Close Corporation: A resolution by its members authorising a member or other official of the corporation to sign the documents on each member's behalf.

Partnership: All the partners shall sign the documents unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such authorisation shall be included in the bid.

Joint Venture: Should two or more firms jointly submit a bid, the bid shall be accompanied by the document of establishment of the joint venture, duly registered and authenticated by a notary public or other official deputed to witness sworn statements, which defines the conditions under which the joint venture will function, the period of duration, the persons authorised to represent the Joint Venture and who are obligated thereby, the participation of the several firms forming the joint venture, and well as any other information necessary to permit a full appraisal of its functioning.

One-person business/sole propriety: This shall be clearly stated and all documents shall be signed accordingly.

DECLARATION WITH REGARD TO COMPANY/FIRM

Name of company/firm…….

Company registration number/ ID number: ……...

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]

Details of person responsible for Bid Document process:

Name : ----------

Contact number : ----------

Office address : ----------

Contractor	***Witness 1***	***Witness 2***	***Employer***	***Witness 1***	***Witness 2***

PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:

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

Prof./Dr/Mr/Ms _____

has been duly authorized to sign all documents in connection with the Bid Document for Contract Number _____ and any Contract which may arise there from on behalf of _____

(BLOCK CAPTIALS)

SIGNED ON BEHALF OF THE COMPANY _____

IN HIS CAPACITY AS _____

DATE _____

FULL NAMES OF SIGNATORY _____

AS WITNESSES: **1.** _____

2. _____

Signatories for close corporations and companies shall confirm their authority by virtue of a resolution as prescribed by the Company's Act and/or other applicable legislations.

Supporting evidence is for the bidder to attach to this form and include the following:

- The resolution must be on the Company Letterhead,
- Be duly signed by the Director/Authorised person,
- The Letter must be dated prior to the authorised person signing of the tender document. Therefore, if the resolution letter is dated after the Authorised person signature it be deemed invalid.

Original or certified copies of the signed resolution will be accepted. Failure to submit the resolution will result in disqualification.

The above requirements will apply to Companies embarking on joint ventures/consortiums, etc.

PRO-FORMA FOR JOINT VENTURES:
Certificate of Authority for Joint Ventures

We, the undersigned, are submitting this Bid Document 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 Document offer an any contract resulting from it on our behalf.

Bidders are required to submit a valid fully signed Joint Venture agreement including the roles and responsibilities they will be performing throughout the contract period and indicate the lead partner.

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

FORM D

FINANCIAL REFERENCES/ BIDDERS'S CREDIT RATING AND DETAILS OF BIDDERS BANKING INFORMATION

Notes to Bidder:

1. The Bidder shall attach to this form a letter from the bank confirming the bank account and details. Failure to provide the required letter with the Bid Document submission shall render the Bidder's offer unresponsive.
2. The Bidder's banking details as they appear below shall be completed.
3. In the event that the Bidder is a joint venture enterprise, details of all the members of the joint venture shall be similarly provided and attached to this form.

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

_____

Signature on behalf of Bidder

N.B.: ORIGINAL LETTER FROM BANK OR BANK STATEMENT (NOT OLDER THAN THREE MONTHS) SHOULD BE INCLUDED IN THE RETURNABLE DOCUMENTS PACK.

FORM E

RECORD OF ADDENDA TO BID DOCUMENTS

N.B: Please note that where appliable, bidders are required to complete the table below acknowledging receipt of Addendum/s. All pages in relation to the Addendum must be striked through with a note **"REPLACED** by **ADDENDUM/S"**. The revised pages in relation to the Addendum/s must be **attached** as an Annexure to the bid document. The initial documents must remain in the bid document and **MUST NOT BE REMOVED** as this will lead to a disqualification.

Kindly note that where addendums are issued, such are communicated to bidders who attended the briefing session at the e-mail address that is supplied by the bidder/s recorded on the attendance register.

The e-mail address supplied by bidders on the attendance register for physical briefings will be utilised as the official communication address. Where virtual briefings are held, the e-mail address submitted by the suppliers on the registration attendance register will be utilised as the official communication address.

It remains the responsibility of the bidder to ensure that the correct valid e-mail address is captured. ERWAT accepts no responsibility for returned messages reflecting to be undeliverable or due to invalid/non-existing details.

The addendum/s are uploaded onto the ERWAT website under the respective tender number and bidders should visit the website before the closing date and time to ensure that all communication has been accessed and taken into account with the submission of this bid.

I/We confirm that the following Addendum/s listed below have been received and added to this document as an Addendum. Please note you may not modify or remove any part of the original Bid document except for the strikethrough requirement.	
Date	**Addendum/s No**

SIGNATURE ON BEHALF OF BIDDER **DATE**

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

FORM F

CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF THE 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.

EXAMPLE OF CONTENT OF THE LETTER

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:** _____

FORM G

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT /PLAN (WHERE APPLICABLE)

FORM H

CERTIFIED COPY OF ID DOCUMENT/S OF OWNERS/MEMBERS/SHAREHOLDERS

FORM I

CURRENT CERTIFICATE OF GOOD STANDING FROM COMPENSATION COMMISSIONER

FORM J

PROGRAMME OF WORKS

(Not Applicable)

FORM K

EXPERTISE OF THE KEY PERSONNEL

1. **Personnel / Individual adequacy:** Portfolio of evidence (CV) should be provided. Indicating similar projects / jobs completed or undertaken by the personnel stated below.

8. **Qualifications:** Portfolio of evidence should be provided for the key staff with supporting Qualifications (SAQA, QCTO etc. accredited) and detailed organogram.

9. **Pro-Forma CV**: A pro-forma curriculum vitae shall be filled in full on the below given forms.

NB: Failure to provide information may lead to non-compliance and disqualification.

Staff Complement			
Bidding companies are required to have the following staff complement available for the duration of this contract with a minimum of three years' experience from date of qualification per staff member.			
NO	**STAFF MEMBER**	**QUALIFICATION**	**BIDDERS TO PROVIDE PROOF OF QUALIFICATION WHERE THEY COMPLY. SUPPORTING DOCUMENTS**
1.	Project Manager (Mechanical Engineer)	B.Eng/BSc Professional Registration (ECSA)	Certified copy of Degree and ECSA Certificate
2.	Process Engineer (Chemical Engineer)	B.Eng/BSc Professional Registration (ECSA)	Certified copy of Degree and ECSA Certificate
3.	Civil Engineer	B.Eng/BSc Professional Registration (ECSA)	Certified copy of Degree and ECSA Certificate
5.	Electrical Engineer	B.Eng/BSc Professional Registration (ECSA)	Certified copy of Degree and ECSA Certificate

KEY STAFF EXPERIENCE					
Position on this Contract	**Full Name**	**ID No.**	**Qualifications**	**No. of Relevant Years of Experience**	**Professional Registration number**
Project Manager **(Mechanical Engineer)**					
Lead Process Engineer **(Chemical Engineer)**					
Lead Civil Engineer					
Lead Electrical Engineer					

PRO-FORMA CURRICULUM VITAE OF KEY PERSONNEL/STAFF

This form should be completed for each key person listed in the functionality criterion

Responsibility or role on the project (as per list in form k)	**PROJECT MANAGER**
Name:	**Date of Birth:**
Profession:	**Nationality:**
Qualifications(Attach Proof of Qualification) :	
Professional Membership (If any):	
Name of Employer (Firm) :	
Current Position :	**Years with firm:**
Employment record: (List of chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: **I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualification and my experience and that I will be available to execute the work for which I have been nominated.** _____ **(Signature of Person named in Schedule) Date**	

This form should be completed for each key person listed in the functionality criterion

Responsibility or role on the project (as per list in form k)	**LEAD PROCESS ENGINEER**
Name:	**Date of Birth:**
Profession:	**Nationality:**
Qualifications (Attach Proof of Qualification) **:**	
Professional Membership (if any):	
Name of Employer (Firm) :	
Current Position :	**Years with firm:**
Employment record: (List of chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: **I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualification and my experience and that I will be available to execute the work for which I have been nominated.** _____ **(Signature of Person named in Schedule) Date**	

This form should be completed for each key person listed in the functionality criterion

Responsibility or role on the project (as per list in form k)	**LEAD CIVIL ENGINEER**
Name:	**Date of Birth:**
Profession:	**Nationality:**
Qualifications (Attach Proof of Qualification) **:**	
Professional Membership (if any):	
Name of Employer (Firm) :	
Current Position :	**Years with firm:**
Employment record: (List of chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: **I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualification and my experience and that I will be available to execute the work for which I have been nominated.** _____ **(Signature of Person named in Schedule) Date**	

This form should be completed for each key person listed in the functionality criterion

Responsibility or role on the project (as per list in form k)	**LEAD ELECTRICAL ENGINEER**
Name:	**Date of Birth:**
Profession:	**Nationality:**
Qualifications (Attach Proof of Qualification) **:**	
Professional Membership (if any):	
Name of Employer (Firm) :	
Current Position :	**Years with firm:**
Employment record: (List of chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: **I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualification and my experience and that I will be available to execute the work for which I have been nominated.** **(Signature of Person named in Schedule) Date**	

FORM L

PROOF OF RELEVANT REGULATORY CERTIFICATION OR OTHER REQUIREMENTS IN TERMS OF THE REQUIRED REGULATORY AUTHORITY AS SET OUT IN THE SCOPE OF WORKS

BIDDERS MUST HAVE A MINIMUM CIDB GRADING OF 8 ME OR HIGHER TO QUALIFY FOR EVALUATION.

FORM M

LETTER OF INTENT TO SUBMIT THIRD PARTY LIABILITY INSURANCE AND ALL RISK CONTRACTORS' INSURANCE TO COVER THIS CONTRACT

Bidders are required to ensure the safekeeping and insurance of items in place until such time that the works/goods or services are handed over to ERWAT and ERWAT has signed off thereon.

FORM N

INCLUDE THE FOLLOWING DOCUMENTS IN THE SUPPORTING DOCUMENTS FILE TO BE SUBMITTED WITH THE ORIGINAL BIDDING DOCUMENT

1. **FOR CLOSED CORPORATIONS**

   CK1 or CK2 as applicable (Founding Statement).

2. **FOR COMPANIES**

   - A copy of the Certificate of Incorporation
   - Certified Copies of the ID's of the Directors and
   - The shareholders' register.

3. **FOR JOINT VENTURE AGREEMENTS**

   - Copy of the Joint Venture Agreement between all the parties,
   - As well as the documents in (1) or (2) and (6) of each Joint Venture member.

4. **FOR PARTNERSHIP**

   - Certified Copies of the ID's of the partners

5. **ONE-PERSON BUSINESS / SOLE TRADER/SOLE PROPRIETOR**

   - Certified Copy of ID

FORM O

BACKGROUND AND WORK EXPERIENCE

Briefly summarize the Company's experience regarding Dewatering technology installations in industrial plants/ and/ or municipal wastewater treatment plants as bidders would have provided under the Functionality criteria. Attach a Certificate of Completion and/ or Reference Letter.

	EMPLOYER	EMPLOYER'S REPRESENTATIVE (NAME, TEL, E-MAIL)	PROJECT TITLE AND DESCRIPTION OF WORK Inc. CAPACITY OF THE WORKS	VALUE OF WORK (R-Rand)	COMPLETION DATE
PROJECT 1					
PROJECT 2					
PROJECT 3					
PROJECT 4					
PROJECT 5					
PROJECT 6					

PROJECT 7					

FORM P

POPIA CONSENT FORM

PROTECTION OF PERSONAL INFORMATION ACT, 4 OF 2013

The Service Provider and ERWAT shall comply with the requirements of Protection of Personal Information Act of 2013 ("POPIA"), and both parties are to ensure that appropriate measures are implemented to protect all personal information processed by both parties for the duration of the contract and beyond the contract expiry. Any breach where personal information is compromised, this must be reported to the affected party within 24 hours after the discovery of the breach.

The Service Provider shall maintain the confidentiality of all Personal Information, ensure that its personnel, joint venture parties, subcontractors are also bound to process and safeguard any personal information that they are entrusted with.

By signing this referral form:

a) I/we hereby grant my/our voluntary consent that my/our personal information may be processed, collected, used and disclosed in compliance with the Protection of Personal Information Act, 4 of 2013.

b) I/we furthermore agree that my/our personal information may be used for the lawful and reasonable purposes in as far as the ERWAT (responsible party) must use my/our information in the performance of its public legal duty.

c) I/we understand that my/our personal information may be disclosed to a third party in as far as the ERWAT must fulfil its public legal duty.

d) I/we furthermore understand that there are instances in terms of abovementioned Act where my express consent is not necessary to permit the processing of personal information, which may be related to litigation or when the information is publicly available. Further details are available on the ERWAT website.

Company name: _____

Company address: _____

_____

Name & Surname of Company Representative: _____

Signature Of Bidder: _____

Designation: _____

Date: _____

Name& Surname of ERWAT Information Officer: _____

Signature: _____

Designation: _____

Date: _____

Name& Surname of ERWAT Deputy Information Officer: _____

Signature: _____

Designation: _____

Date: _____

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

C1 AGREEMENTS AND CONTRACT DATA

Part C1: 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

C1.5 Corporate Governance Breach Clause

C1.1 FORM OF OFFER AND ACCEPTANCE

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter in contract in respect of the following works: ***PROJECT NO: ERW2610/05 THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS***

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

By the representative of the Bidder, deemed to be duly authorised, 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 RATES FOR THE GOODS, AS SET OUT IN THE PRICING SCHEDULE/BILL OF QUANTITIES (THE PRICES INCLUSIVE OF VALUE ADDED TAX), IS HEREBY CONFIRMED FOR THE PERIOD OF THE CONTRACT PERIOD INCLUDING THE PROVISIONS FOR THE ANNUAL ESCALATIONS (WHERE APPLICABLE)

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 Tender Data, whereupon the Bidder becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

Signature(s) ....

Name(s) ....

Capacity ....

For the Bidder .....
(Name and address of organisation)

Name & Signature
Of Witness ....
Name Date

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:

- Agreements and Contract Data (which includes this Agreement)
- Pricing Data
- Scope of Work
- Site information

And drawings and documents or parts thereof, which may be incorporated by reference into above stated terms.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the 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, which must be duly signed by the authorised representative(s) of both parties.

The Bidder shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer (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 at or just after the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

Signature(s) ....

Name(s) ....

Capacity ....

For the Employer .....
(Name and address of organisation)

Name & Signature
Of Witness ....
Name Date

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.

2. A Bidder's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of Offer and Acceptance; the outcome of such agreement shall be recorded here.

3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the Tender documents and which it is agreed by the Parties becomes an obligation of the contract, shall also be recorded here.

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

1 Subject .....

Details .....

.....

2 Subject .....

Details .....

.....

3 Subject .....

Details .....

.....

4 Subject .....

Details .....

.....

5 Subject .....

Details .....

.....

By the duly authorised representatives signing this Schedule of Deviations, 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 Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the Offer agreed by the 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 Tender 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.

FOR THE BIDDER:

Signature(s) ....

Name(s) ....

Capacity ....

For the Bidder .....
(Name and address of organisation)

Name & Signature
Of Witness ....
Name Date

FOR THE EMPLOYER

Signature(s) ....

Name(s) ....

Capacity ....

For the Employer .....
(Name and address of organisation)

Name & Signature
Of Witness ....
Name Date

C1.2 CONTRACT DATA

GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "FIDIC: Conditions of Contract for Plant & Design Build *(Yellow Book, Second Edition,2017)*)

Documents can be ordered from SAICE who can be contacted through their website www.saice.org.za. Physical address: SAICE House, Block 9, Thornhill Office Park, Bekker Street, Midrand, Johannesburg. Telephone number: (011) 805 5947.

It is agreed that the only variations from the FIDIC: Conditions of Contract for Plant & Design 2017 Build are those set out hereafter under "Special Conditions of Contract".

SPECIAL CONDITIONS OF CONTRACT

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions of Contract shall amplify, modify or supersede, as the case may be, the FIDIC: Conditions of Contract for Plant & Design Build 2017 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions hereafter are numbered "SCC" followed in each case by the number of the applicable clause or subclause in the FIDIC: Conditions of Contract for Plant & Design Build 2017, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the General Conditions, and an appropriate heading.

AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

DATA PROVIDED BY THE EMPLOYER

Clause	Data
	Definitions The definitions contained in Clause 1.1 are hereby amended and/or supplemented as follows:
SCC 1.5	**Contract** **Add the following:** **Contract Documents** The Service Level Agreement, Bid document and related attachments shall constitute the complete contract agreement. This is a CIDB Contract, and the CIDB Board has initiated a BULD Programme which focuses on Targeted Enterprise Development and/or Skills Development. This contract is affected by CIDB B.U.I.L.D Programme for Skills Development, therefore, the CIDB standard for Developing Skills through Infrastructure Contracts (Government gazette 28 April 2023) which forms part of the B.U.I.L.D Programme Standards shall form part of the contract. This standard requirement as well as any other regulatory or legislative requirements will be included during the Service Level Agreement (SLA) stage.

Clause	Data
	It should be noted that all ERWAT contracts are subject to the Municipal Financial Management Act (MFMA Act 56 of 2003), therefore in the event that there is any contradiction between the MFMA (*Act 56 of 2003*) and the FIDIC YELLOW BOOK 2017 or any other applicable contractual agreement, the MFMA (*Act 56 of 2003*) and its applicable regulations shall take precedence.
SCC 11	The Defects Liability Period is **12** months from the date of the Certificate of Completion. The Defects Liability Period is **12** months from the date of the Certificate of Completion per installation
SCC 8.2	The Works shall be completed within **36** months from the commencement date on an "as and when required basis". The Purchase Orders of the Works shall be placed within **36** months from the commencement date on an "as and when required basis".
SCC 1.1.30	The Name of the Employer is **ERWAT** The address of the Employer is: The Managing Director Hartebeestfontein Office Park R25 (Bapsfontein/Bronkhorstspruit) Kempton Park Telephone: 011 929 7000
SCC 3.2.3	**Add the following:** Approval of the Employer is required for: i). Cessions – issuing of cessions by the Contractor is expressly prohibited except if and when prior written approval of the Employer under the signature of the Accounting Officer for the issue of the cession has been requested and obtained ii). Use of contingencies – for all items for which rates have not been approved in terms the contract. iii). Extension of Time – extension of time can only be granted by the Employer.
SCC 4.1.2	**Add the following:** **"**When completed, the parts of the works designed by the Contractor, to the extent specified in the Contract, shall be fit for the purposes for which the Works are intended"
SCC 4.4.1	**Add the following:** The Contractor is to submit to the Employer in writing a request for appointment of a particular sub-contractor. Accompanying this request is to be the full detail of the sub-contractor, including: ▪ Previous experience ▪ Work which will be sub-contracted to him/her ▪ Approximate value of the work to be sub-contracted

Clause	Data
	Before the Employer in terms of Clause 6.10 hereof issues any certificate that includes any payment in respect of work done or goods supplied by any sub-contractor appointed in accordance with the provisions of Clause 4.4 of the General Conditions of Contract for Construction works (2015, Third Edition), he shall be entitled to call upon the Contractor to furnish reasonable proof that all payments (less retention moneys) included in previous certificates in respect of the work or goods of such sub-contractors have been made or discharged by the Contractor, in default of which, unless the Contractor: ▪ Informs the Employer in writing that he has reasonable cause for withholding or refusing such payment; and ▪ Submits to the Employer reasonable proof that he has so informed such sub-contractor in writing.
SCC 4.9.1	**Add the following:** "All equipment on site shall be in a good working order, and is to be in such a condition that it can achieve production rates which are typical of the industry standards. Should any equipment, in the opinion of the Employer, be substandard or breaks down frequently to such an extent that it affects the progress on the project, the Employer may instruct the Contractor to replace such equipment.''
SCC 1.5	**Add the following :** The documentation required before Commencement of the Works are: • Health & Safety Plan (Refer to Sub – Clause 6.7 of FIDIC Yellow Book 2nd Ed 2017) • Initial Programme (Refer to Sub – Clause 8.3 of FIDIC Yellow Book 2nd Ed 2017) • Security (Deed of Guarantee) (Refer to Cl. 18 of FIDIC Yellow Book 2nd Ed 2017) • Insurances (Refer to Cl. 18 of FIDIC Yellow Book 2nd Ed 2017) The time for the documentation required before Commencement of the Works execution is **28** days after receiving letter of acceptance
SCC 8.1	The Contractor shall commence executing the Works within **42** days from the date the contractor receives the acceptance letter. The Commencement Date shall be the date the contractor is given possession of site.
SCC 8.3	**Add the following:** The special non-working days are the official builder's holiday plus all statutory public holidays. The year-end break commences on the 15th day of December and ends on the 15th day of January.

Clause	Data
SCC 8.4	**Add the following:** A delay caused by inclement weather conditions will be regarded as a delay only if, in the opinion of the Employer, all progress on an item or items of work on the critical path of the working programme of the contractor has been brought to a halt. Delays on working days only (based on a five-day working week) will be taken into account for the extension of time, but the Contractor shall make provision in his programme of work for an expected delay of "n" working days caused by normal rainy weather, for which he will not receive any extension of time, where "n" equals 5 days. Extension of time during working days will be granted to the degree to which actual delays, as defined above, exceed the number of "n" workings days.
SCC 8.5	**Add the following:** Extensions of time in respect of clause 8.5 in respect of abnormal rainfall shall be calculated using the following formula for each calendar month or part thereof: $V = (Nw - Nn) + \frac{(Rw - Rn)}{X}$ Where: V = Extension of time in calendar days in respect of the calendar month under consideration. Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded. Nn = Average number of days in the relevant calendar month, as derived from existing rainfall records, on which a rainfall of 20mm or more has been recorded for the calendar month. Rw = Actual average rainfall in mm recorded for the calendar month under consideration. Rn = Average rainfall in mm for the calendar month as derived from existing rainfall records as stated in the Site Information. For purposes of the Contract Nn, Rn, X and Y shall have those values assigned to them in the South African Weather Service's rainfall records of the nearest station to the site. If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn. The total extension of time shall be the algebraic sum of all monthly totals for the period under consideration, but if the total is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for part of a month shall be calculated using pro rata values of Nn and Rn. This formula does not take account flood damage which could cause further or concurrent delays and will be treated separately as far as extension of time is concerned.

Clause	Data
	The factor (Nw – Nn) shall be considered to represent a fair allowance for variations from the average in the number of days during which rainfall exceeds 10 mm. The factor (Rw-Rn) shall be considered to represent a fair allowance for variations from the average in the number of days during which the rainfall did not exceed 10 mm but wet conditions prevented or disrupted work. For the purpose of applying the formula, accurate rain gauging shall be taken at a suitable point on the Site, and the Contractor shall at his own expense, take all necessary precautions to ensure that rain gauges cannot be interfered with by unauthorized persons.
SCC 8.7	**Add the following:** The penalty for failing to complete the works shall be calculated as follows; Purchase Order value multiply 0.5% per day
SCC 11.9	**Add the following:** The Security to be provided by the Contractor shall be the Performance guarantee liability of **10 %** of the Purchase Order. This guarantee shall be delivered within 21 days of the Commencement Date.
SCC 18	**Add the following:** The Form of Guarantee is to contain the wording of the pro-forma document included in the General Conditions of Contract (Pro-forma included in section C1.3 to this document). Form of Guarantee: construction guarantee: the successful bidder will be required to submit a construction guarantee that is equal to 10% of the total contract value all-inclusive and must be submitted to the SCM office within 10 working days from date of appointment. Only original guarantees issued by an accredited and registered financial institution will be accepted and will only be released on final completion of works. "
SCC 14.2	**Add the following:** The percentage advance on materials not yet built into the Permanent Works but received on site is **0** %.
SCC 14.2	**Add the following:** The **5%** retention on the purchase order value will be released upon completion of the works, and the remaining **5%** retention amount shall be released at the end of **12 months** defects liability period
SCC 18	**Add the following:** The limit of retention money is 10 % of the purchase order value.
SCC 7.1	**Add the following:** All materials shall comply with the requirements of the South African Bureau of Standards and shall bear the official standardization mark. Where SABS/SANS/ISO standard does not exist for a certain material, or a material does not bear the official standardization mark, the Employers approval of such material must be gained before use thereof.

Clause	Data
SCC 18.2	**Add the following:** The value of the materials supplied by the Employer to be included in the insurance sum is nil.
SCC 8.1.2	**Add the following:** The required insured amount to cover professional fees for repairing damaged infrastructure and equipment and loss of time on the construction schedule is to be 15% of the Purchase Order value.
SCC 18.2	**Add the following:** The limit of indemnity for liability insurance is 10 % of Purchase Order value. This will be finalized at Service Level Agreement (SLA) stage
SCC 15.5	The Client Representative shall give the Contractor a written termination notice on behalf of the Employer if the circumstances and performance of the Contractor in terms of the contract warrants such action.
SCC 8.1.4	**Add the following:** This is a framework contract where a separate quote will be requested for each order.
SCC 8.1.5	**Add the following:** The rotation of the request for quotation will be done as follows. The bidders appointed on the panel will be divided into groups based on the number of successful bidders. The requested will rotated between the groups.
SCC 4.4	**Sub-contracting** – the contractor shall not subcontract the whole contract. No work may be sub-contracted to another party unless approval is given by the Client's Representative in writing. The Contractor is to submit to the Client's Representative in writing a request for appointment of a particular sub-contractor. Accompanying this request is to be the full detail of the sub-contractor, including: • Previous experience • Work which will be sub-contracted to him/her • Approximate value of the work to be sub-contracted Before the Client's Representative issues any certificate that includes any payment in respect of work done or goods supplied by any sub-contractor appointed in accordance with the FIDIC: General Conditions of Contract for Plant and Design-Build (2017), he shall be entitled to call upon the Contractor to furnish reasonable proof that all payments (less retention moneys) included in previous certificates in respect of the work or goods of such sub-contractors have been made or discharged by the Contractor, in default of which, unless the Contractor: • Informs the Client's Representative in writing that he has reasonable cause for withholding or refusing such payment; and • Submits to the Client's Representative reasonable proof that he has so informed such sub-contractor in writing.

Clause	Data	
SCC 7	**Construction Equipment** - All equipment on site shall be in a good working order and is to be in such a condition that it can achieve production rates which are typical of the industry standards. Should any equipment, in the opinion of the Client's Representative, be substandard or breaks down frequently to such an extent that it affects the progress on the project, the Client's Representative may instruct the Contractor to replace such equipment	
SCC 7.1	**Construction** - The following applicable standards relevant to this contract are:	
	SABS 1200 A	General
	SABS 1200 C	Site Clearance
	SABS 1200 D	Earthworks
	SANS 1200 G	Concrete
	SANS 1200 GA	Concrete (small works)
	SANS 1200 DC	Gabions & Stone Pitching
	SANS 1200 H	Structural Steelwork
		TMH7 – part 1 & 2: Code of practice for the design of Highway Bridges & Culverts in South Africa
		Standard Specifications for Road and Bridge Works, CSIR

PART 2: DATA PROVIDED BY THE CONTRACTOR

Sub-Clause	Data
1.1.17	The Contractor is: Name: ..... The Address of the Contractor is: Address (physical): .... Address (postal): .... Telephone: ..... Facsimile: ..... E-mail: .....
1.1.22	Contractors Representative Name: ..... Telephone: ..... Facsimile: ..... E-mail: .....

C1.3 FORM OF GUARANTEE

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

WHEREAS .....

at .....

(Hereinafter referred to as "the Employer")

Entered into, on the..... day of ..... 20....., at .....

Pro-Forma

a Contract with .....

at .....

(Hereinafter referred to as "the Contractor")

for the construction of .....

.....

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of surety ship 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 security;

NOW THEREFORE WE, ... hereby guarantee and bind ourselves jointly and severally as Sureties and Co-Principal Debtors to the Employer under renunciation of the benefits of division and excursion 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 authorised and/or contemplated by the terms of the said contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the Due Completion Date of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the Due Completion Date which the Employer may make, give, concede or agree to under the said Contract.

2. The Employer shall be entitled, without reference to us, to release any securities held by it, and to give time to or compound or make any other arrangement with the Contractor.

3. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.

4. Our total liability hereunder shall not exceed the sum of (R.....).

5. We hereby choose *domicilium citandi et executandi* for all purposes arising hereof at

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

day of ..... 20.....

As witnesses:

1. ..... Signature

2. ..... Signature

Duly authorised to sign on behalf of .....

Address

.....

.....

.....

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 EKURHULENI WATER CARE COMPANY (ERWAT) (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 THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHSCOMMISSIONS and has accepted a Bid 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 WITNESSED AS FOLLOWS:

1 The Mandatory shall execute the work in accordance with the Contract Documents pertaining to this Contract.

2 This Agreement shall hold good from its Commencement Date, 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 Approval Certificate issued in terms of Clause 5.16 of the General Conditions of Contract for construction works 2015 (hereinafter referred to as "the GCC"), as contained in the Contract Documents pertaining to this Contract, or

(b) The date of termination of the Contract in terms of Clauses 9.1, 9.2, 9.3 of the GCC 2015.

3 The Mandatory declares himself to be conversant with the following:

(a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of the Act:

(i) Section 8 : General duties of Employers to their employees

(ii) Section 9 : General duties of Employers and self-employed persons to persons other than employees

(iii) Section 37: Acts or omissions by employees or mandatories

(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 8.4 of the GCC 2015 (as amended by Special Condition of Contract) and all relevant requirements of the above-mentioned Volume, 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; the safety procedures and rules of the employer 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 hereof the parties are to 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 MANDATORY ..... :

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 .....:

C1.5 CORPORATE GOVERNANCE BREACH CLAUSE

1. Ekurhuleni Water Care Company ("ERWAT") requires [insert name of company] ("the Company") to comply, mutatis mutandis with the Code contained in the King III Report and Code of Good Corporate Governance (below "the Code") for the term of this Agreement and any extension thereof.

2. The Company irrevocably undertakes and agrees that it will, mutatis mutandis, comply with the Code for the term of this Agreement and any extensions thereof.

3. The Company acknowledges and agrees that:

   3.1 It is essential that the Company complies with the Code, in order to discharge all of its obligations under and in terms of the Agreement in a proper, efficient and professional manner, and

   3.2 ERWAT will be prejudiced and may suffer damages in the event of the Company failing to comply with the Code.

4. The Company shall be required, within seven (7) days of the end of each calendar month during the term of this Agreement (and any extensions thereof), to furnish ERWAT with a written certificate, signed by the directors of the Company [alternatively members of the Close Corporation], certifying that the Company has complied with the provisions of the Code during the preceding months.

5. ERWAT shall have the right, without assigning any reason therefore and at any time, to appoint either the Institute of Directors of South Africa or a firm of chartered accountants or attorneys, to conduct an audit of the business and affairs of the Company in order to ascertain whether the Company is indeed complying with the terms of the Code.

   To this end, the Company irrevocably undertakes and agrees to co-operate fully with the party conducting such investigation for and on behalf of ERWAT and to make available to such party all such documentation and all such information as the investigation party may require to fully discharge its obligations under and in terms hereof and to report fully to ERWAT.

   In the event of it being found that the Company is not complying with the Code, then ERWAT shall be entitled to (a) regard this as a breach of the agreement and (b) recover the costs of the investigation, on an attorney and client basis, from the Company. In the event of it being found that the Company is, in fact, discharging its obligations under and in terms of the Code, then ERWAT shall bear the costs incurred in such investigation. In either of the foregoing events, the Company shall be entitled to receive a copy of the written report once same has been concluded by the investigating party.

6. In the event of the Code being replaced with another Code (or similar document), then such replacement document shall replace the Code and a reference to the Code shall be deemed to be a reference to such replacement document. The reference to the Code shall be deemed to include any statutory codification of directors' obligations and duties which may be enacted in the Republic of South Africa at any time in the future.

7. In entering into this Agreement, the Company represents and warrants to ERWAT that it is familiar with the Code, that it fully understands and appreciates the rights, obligations and recommendations therein contained and agrees to be bound thereby as herein recorded.

Initial: _____

ERWAT
EXCELLENCE IN WATER CARE

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

C2 PRICING DATA

C2.1 Pricing Instructions
C2.2 Bill of Quantities

ERWAT
EXCELLENCE IN WATER CARE

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

C2.1 PRICING INSTRUCTIONS

PRICING INSTRUCTIONS:

1. This Contract is a Framework Agreement and shall be solely used to provide services on as-instructed basis, the Service Provider shall only tender rates against each item given in the Schedule of Rates so that as-and when the employer requires services scoped as per this contract; the Service Provider is in position, without delay, to render such services.

2. The Pricing Schedule is designed to mirror the provisions of the Scope of Work i.e.; the bid is designed around the existing technologies and alternative technologies that are similar or compatible with the existing technologies.

3. The Service Provider shall tender his rates considering that the employer does not commit itself to offer the Service Provider any minimum or maximum volume and or value of work during the term of the Framework Agreement.

4. The Service Provider shall ensure that a rate/amount is entered against each item in the Schedule of Rates. An item against which no rate or amount is entered shall be deemed grounds for a partially completed bid document and will lead to disqualification.

5. The rates/amounts tendered in the Schedule of Rates shall be the full inclusive rates/amounts to the Employer for the work described under the several items. Such rates/amounts shall cover all the costs and expenses that may be required in and for the construction of the work described, and shall cover the costs of all general risks, profits, overhead charges, taxes (including value-added tax), liabilities and obligations set forth or implied in the documents on which the Tender is based. The Service Provider shall ensure that all inserted rates are reasonable as these shall be used during bid evaluation and shall become the basis for payment of all work that will be carried out during the Term of the Framework Agreement.

6. The applicable Conditions of Contract, the Contract Data, the Specifications (including the Project Specifications) and the Drawings (where attached) shall be read in conjunction with the Schedule of Rates.

7. Descriptions in the Schedule of Rates are abbreviated and may differ from those in the Standardized and Project Specifications. No consideration will be given to any claim by the Contractor submitted on such a basis.

8. Unless stated to the contrary, items are measured net in accordance with the Drawings without any allowance having been made for waste.

9. For the purposes of this Schedule of Rates, 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 Standardized, Project or Particular Specifications
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of work at which the Bidder Tenders to do the work
Amount	:	The quantity of an item multiplied by the tendered rate of the (same) item

Sum : An amount tendered for an item, the extent of which is described in the Schedule of Rates, the Specifications or elsewhere, but of which the quantity of work is not measured in units

10. The units of measurement indicated in the Schedule of Rates are metric units. The following abbreviations may appear in the Schedule of Rates:

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
kW	=	kilowatt
kN	=	kilo Newton
kg	=	kilogram
t	=	ton (1 000 kg)
%	=	per cent
MN	=	mega Newton
MN-m	=	mega Newton-metre
PC Sum	=	Prime Cost Sum
Prov Sum	=	Provisional Sum

11. 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.

12. Mistakes made by the Bidder in completion of the Schedule of Rates shall not be erased or covered with correcting fluid. A line shall be drawn through the incorrect entry, and the correct entry shall be written above the deletion and initialled by the Bidder. Failure to observe this Condition will lead to the Tender being disqualified.

13. **This is a Rates based contract developed under an indicative scope of work and therefore there are no quantities or Totals set out in the pricing schedule, Work Orders will only be generated on "as and when" required basis according to the rates tendered by the service provider as contained in the Schedule of Rates.**

14. Work Orders generated on "as and when" basis shall contain estimate quantities for the proposed Works. The actual quantities of work/services rendered as finally measured and accepted and certified for payment in accordance with the applicable Conditions of Contract, and not the estimate quantities set out in the Bill of Quantities for the Works Order, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by differences between the quantities in the Bill of Quantities for the generated Works Order and the quantities certified for payment.

15. The successful bidder will be required to submit a quote for the works required prior to being issued an official order and will be limited to the rates as set out herein.

16. Evaluation for price scoring will be done by calculating the line items in the table below to an indicative sum to determine the highest scoring bidder as provided for in the PPPFA Regulation 2022.

17. The effect of changes in prices or law on the amounts due shall be adjusted on the following basis:

    a) No price adjustment over the first 12-month period of the Contract.
    b) On the 12-month anniversary date of the signing of the agreement, the rates shall be adjusted by a twelve-month year on year CPI index (as published in the monthly bulletin PO141.1 of statistics South Africa) ruling on the 12-month anniversary date of the signing of the contract.
    c) Where CPI is not practically implementable, CPA will be considered based on the indices referred to in the MBD 3.2 form. ERWAT reserve the right to request additional information from the bidder to substantiate the bidders' request above CPI.

18. It is the Main Contractor's responsibility to make sure their offered Rates are market-related such that they can in turn pay market-related Rates to subcontractors. Should there be a deficit between the Main Contractor's rates and the Subcontractor's tendered or negotiated Rates, the main Contractor will have to cover for such difference.

19. The Contractor's monthly invoice shall be accompanied by confirmation from the Engineer or his duly authorised representative that items listed for payment have been successfully executed and/or delivered as required. Failure to obtain such confirmation from the Engineer or his duly authorised representative shall result in non-payment of the Contractor's invoice until the default has been corrected or the deemed incomplete items are excluded from the invoice.

20. The Contractor shall note that payment shall only be made for Works activities successfully (delivering the end result) executed, complying with the quality requirements and provided to the Engineer or his duly authorised representative.

21. The Provisional Sums and Tendered amounts/prices shall be applicable per Works Order or IPW issued and should not be deemed to represent the maximum available budget for the entire Framework Contract.

22. Bidders are **not permitted** to add any additional pricing to ERWAT's pricing schedule nor attach their own pricing schedule to this bid.

23. Bidders must complete the pricing schedule on the official ERWAT bid document issued.

24. Failure to adhere hereto will result in bidders' submission being disqualified.

The price should be inclusive of all direct and indirect costs (including transport, accommodation, delivery, collection, labour and other applicable fees).
Bidders are required to complete the pricing schedule in full. Failure to complete the pricing in full will result in disqualification.

The following will be accepted to be a fully completed pricing schedule:

Bidders to indicate accurately:

- A price is written/typed in Ink.
- No pencil or tippex will be accepted.
- Please note that where bidders opt to type in the prices, the original bid document will be accepted by ERWAT.

- The document is not to be retyped and no additional pricing schedule in the bidder's format will be accepted.
- In the event that there are two pricing schedules submitted by the bidder, the original issued document from ERWAT will prevail.

Items the bidders are not charging for or items that is included as part of items already costed in pricing schedule must be indicated as listed below;

- Only R0 will be accepted as no charge.

***The following inputs on the document is not permitted and will lead to disqualification (non-responsive bid*).**

- STRIKE THROUGH the BOQ
- Item left blank
- Bidder indicated N/A

PROJECT NO: ERW2610/05

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

C2.2 BILL OF QUANTITIES

PRICING SCHEDULE / BILL OF QUANTITIES (BOQ) TEMPLATE

C2.2.1 Workstream

Bidders shall complete a Schedule of Rates using the template below, priced per Water Care Works.

A. Personnel for ad hoc services

Item	Description	Unit	Rate (VAT Inclusive) (ZAR)
A1	Project Manager (Pr. Mechanical Engineer)	hr	R
A2	Lead Process Engineer (Pr. Chemical Engineer)	hr	R
A3	Electrical Engineer	hr	R
A4	Structural/ Civil Engineer (Pr. Eng)	hr	R
A5	Environmental Officer	hr	R
A6	Health & Safety Officer (Pr. SACPCMP)	hr	R

Nineteen Water Care Works

Item	Delivery Stage	Description	Unit	Quantity	Rate Amount
1	**Baseline Assessments (Ref. C3.1.2.2)**	Comprehensive condition assessment of existing infrastructure and collection of baseline data	No.	19	
2	**Professional Services (Ref. C3.1.3 Design Brief)**	Professional engineering design services rendered in accordance with the ECSA Guidelines covering the applicable project stages	No.	19	
3	Factory Acceptance Testing (FAT)	Pre-inspection and Factory Acceptance Testing of all equipment covered by this contract including quality control plan (including accommodation or transportation to and from location where such testing / pre-inspection is to occur should it be outside the radius of 80km from related plant or head office for 3 of ERWAT's representatives.)	No.	19	
4	**Complete Dewatering Unit and Auxiliary Works (Ref. C3.1.3 Design Brief)**	Supply, delivery, installation and testing of the dewatering unit(s) and all associated process equipment	No.	19	
10	**Maintenance Service /Contract (Ref. C3.7)**	Rate for scheduled/callout maintenance beyond the warranty period, as and when instructed	No.	19	
11	**Prime Cost**	Prime Cost the Dewatering unit excluding the auxiliaries	Sum		R 12 Mil

Item	Delivery Stage	Description	Unit	Quantity	Rate Amount
12	**Handling Fee**		%	10%	R1.2 Mil

5. PROVISIONAL SUM

Description	**Amount (incl. VAT)**
***Provisional Sum subject to approval**	**R35 000 000.00**
Administrative fee	**R500.00**

a. Provisional sum has been included in the pricing schedule and will only be applicable where related goods are required that are not catered for in the pricing schedule.
b. Items will be on an as-and-when-required basis, subject to prior approval.
c. ERWAT may request a quote from the appointed bidder/s (where applicable) for the items/services required.
d. ERWAT reserves the right to verify market-related costs, which includes the sourcing of alternative quotation for the items/services in relation to actual cost verification.
e. Payments for such items/services will be on actuals, plus the administrative fee as listed in the pricing schedule. Please note that the administrative fee will only be applicable to items not listed in the pricing schedule, limited to per order/ per job, which will be deducted from the provisional sum.
f. The supporting documentation that must be supplied is the quotation from the appointed company or third-party supplier.
g. The provisional sum value is valid for the total contract period.

I, the undersigned, the authorised designated signatory, undertake to carry out the works in accordance with the conditions of contract, the specifications for the tender sum as indicated and within the time for completion as specified in the Contract.

BIDDER'S name: _____

BIDDER'S signature: _____ Date: _____

Name of Firm: _____

Address _____

_____

_____

Telephone number: _____

Fax Number: _____

Cellular number: _____ E

Mail Address: _____

LIST OF IMPORTED ITEMS

Contractors to list all items which are not solely South African manufactured.

ITEM	DESCRIPTION	R VALUE	ROE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

ERWAT
EXCELLENCE IN WATER CARE

C3

SCOPE OF WORK

THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS

DETAILED CONTENTS (VOLUME 3)

PART C3 SCOPE OF WORKS

C3.1 Technical Scope of Works

C3.1.1 Background

C3.1.2 Extent of the Works
C3.1.2.1 General requirements
C3.1.2.2 Current/Existing Strategies and Infrastructure Conditions

C3.1.3 Design Brief

C3.2 Engineering

C3.3 Construction

C3.4 Management of the works

C3.5 Health and Safety

C3.6 Environmental Management during Construction

C3.7 Quality Assurance Requirements

C3.1 Technical Scope of Works

C3.1.1 BACKGROUND

ERWAT operates 19 Water Care Works (WCWs) that collectively generate approximately 91 to 240 tonnes of wastewater sludge per day. Sludge is currently managed using sludge paddies and drying beds. Although these systems provide a practical means of sludge storage and passive dewatering, they are associated with several operational and environmental challenges, including extensive land requirements, dependence on climatic conditions, prolonged drying periods and the potential leaching of nutrients and other contaminants into the surrounding environment.

To improve sludge management practices, ERWAT intends to progressively implement mechanical sludge dewatering systems across its Water Care Works. ERWAT seeks to establish a Framework Agreement with service providers experienced in the design, supply, delivery, installation and commissioning of sludge dewatering systems at various ERWAT Water Care Works on an "as and when required" basis for a period of thirty-six (36) months.

C3.1.2 EXTENT OF THE WORKS

C3.1.2.1 GENERAL REQUIREMENTS

Not all ERWAT Water Care Works have existing dewatering infrastructure. The scope of work therefore differs by site:

- Works with no existing dewatering facility: the Contractor shall design and provide a complete, new dewatering system, including the housing/building and all associated civil, mechanical and electrical works.
- Works with an existing dewatering facility: the proposed technology shall be integratable with the existing civil structure, mechanical, electrical and process infrastructure, subject to the infrastructure status described in Section C3.1.3.

Table 1 (Section **C3.1.2.2**) classifies each of ERWAT's Water Care Works accordingly.

In accordance with its sludge management obligations as stipulated in its licence agreement, ERWAT is required to maintain sustainable sludge management capabilities that safeguard both the environment and public health. ERWAT hereby invites suitably qualified bidders to submit proposals for the provision of sludge dewatering technologies.

Preference will be given to technologies that demonstrate the following characteristics, in addition to meeting the minimum performance requirements in Section C3.1.3.

i. Site induction training has to be completed before any work can be undertaken. (both general and site specific)
ii. The contractor must comply with the ERWAT Permit to Work and Safe operation procedures.
iii. All the relevant work permits and authorization has to be obtained before any work can be undertaken.
iv. All work done and equipment supplied has to be in accordance with the applicable standards as listed in this document.
v. No work shall be undertaken without an official purchase order or written confirmation via e-mail in case of an emergency from the designated ERWAT representative.
vi. No equipment may be removed from site without written permission from the relevant plant manager.

vii. The installation of any equipment shall include the putting back into operation, testing, special testing (if required) and adjustments on the equipment.
viii. A project and quality control plan will be required for any installation of equipment.
ix. All the required tools, consumables, testing facilities, and other requirements to perform the work as per the Contract shall be provided by the contractor.
x. ERWAT reserves the right to hold the contractor responsible for any equipment that will be damaged due to the contractor's negligence or poor workmanship.
xi. ERWAT reserves the right to award this contract to one or more bidders.
xii. This tender is issued as a Framework Agreement for the design, supply, installation and commissioning of sludge dewatering solutions at various ERWAT Water Care Works on an as-and-when-required basis for a period of thirty-six (36) months.

C.3.1.2.2 CURRENT/EXISTING STRATEGIES AND INFRASTRUCTURE CONDITIONS

The current sludge management strategy at ERWAT Water Care Works consists of sludge drying beds, a dewatering facility, or a combination of both. Table 1 below summarises the existing infrastructure, the current dewatering status, and the design data applicable to each Water Care Works. The table is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract.

The bidder should allow for a comprehensive condition assessment of existing Infrastructure which includes but not limited to:

- Physical Survey: Detailed measurement and dimensional survey of the existing dewatering facility (if applicable), including floor space, headroom, overhead crane capacity and hook height, and pit depths.

- Structural Integrity: Assessment of the civil structure (floors, walls, supporting beams) to determine if it can support the new equipment's dynamic and static loads.

- Existing Interfacing Services:

    - Sludge Feed: Evaluation of existing sludge feed pumps, piping, and valves (materials, condition, capacity).

    - Polymer System: Assessment of the existing polymer make-down units, aging tanks, and dosing pumps.

    - Filtrate/Cake Handling: Evaluation of filtrate drainage systems and existing cake conveyance systems

- Baseline Performance Data: Collection of current operational data (flows, %TS etc)

Table 1: Existing Infrastructure and Design Data

Water Care Works	Existing Sludge Management	Dewatering Infrastructure Status	Influent Flow (Ml/d)	Estimated Sludge Discharged (kg/d)	Max Sludge Discharged (kg/d)	Wet Sludge Total Solids (%)
Hartebeestfontein	Sludge from PSTs and biological reactors; 10 unheated, unmixed digesters (9 digestion, 1 storage).	No dedicated dewatering facility, new facility required.	47.2	9 000	18 000	3.9
Olifantsfontein	PSTs and biological reactors feed unheated/unmixed digesters (currently blocked). WAS dewatered via existing belt filter press or dried on beds.	Existing facility (belt filter press), upgrade/integration required.	121.15	4 910	12 300	5.3
Ancor	PSTs and biofilters feed 5 unmixed/unheated closed digesters and 4 mixed open digesters. Sludge dried on beds/fields.	No dewatering facility, new facility required.	26.9	60	60	5.7
Benoni	PSTs feed 3 closed and 8 open, unheated/unmixed digesters. Sludge dried on beds/land.	No dewatering facility, new facility required.	4.10	180	330	2.9
Herbert Bickley	PSTs and biological reactors; 8 mixed (not heated) anaerobic digesters, 2 aerobic	No dewatering facility, new facility required.	18.96	1 870	4 570	5.4

Water Care Works	Existing Sludge Management	Dewatering Infrastructure Status	Influent Flow (Ml/d)	Estimated Sludge Discharged (kg/d)	Max Sludge Discharged (kg/d)	Wet Sludge Total Solids (%)
	digesters.					
Daveyton	RAS diversion to WAS sump; sludge pumped to 2 lined anaerobic lagoons, overflow to 6 unlined lagoons.	No dewatering facility, new facility required.	8.64	1 800	4 075	0.5–1
Carl Grundlingh	WAS pumped to open aerobic digester before land disposal.	No dewatering facility, new facility required.	1.9	2 890	15 900	5.2
Rynfield	PSTs and biological reactors; 4 closed + 1 open digester, unheated/unmixed. Sludge dried on beds.	No dewatering facility, new facility required.	10.69	2 870	7 130	5
Tsakane	WAS to open aerobic digester; primary sludge and digested sludge pumped to anaerobic lagoons.	No dewatering facility, new facility required.	14.68	930	2 740	1.7
Welgedacht	Primary sludge from 5 PSTs digested anaerobically and dewatered; WAS sent directly to dewatering.	Existing dewatering facility, may require upgrades/integration.	72.48	8 790	22 600	2
Heidelberg	Raw sludge to 3 unmixed/unheated anaerobic digesters, gravitates to drying	No dewatering facility, new facility required.	6.75	2 670	4 900	1.5

Water Care Works	Existing Sludge Management	Dewatering Infrastructure Status	Influent Flow (Ml/d)	Estimated Sludge Discharged (kg/d)	Max Sludge Discharged (kg/d)	Wet Sludge Total Solids (%)
	beds; WAS aerobically digested and irrigated.					
Jan Smuts	PSTs and biofilters feed 6 closed, unheated digesters (2 mixed) into secondary open digesters; dried on beds.	No dewatering facility, new facility required.	7.83	90	490	10
JP Marais	No digesters; WAS pumped to main outfall sewer to Welgedacht WCW (Link 2).	No dewatering facility, new facility required.	13.32	20	40	<1
Ratanda	WAS from biological reactor pumped to drying beds; dried sludge stockpiled for cattle feed.	No dewatering facility, new facility required.	4.8	620	2 280	<1
Dekema	PSTs and biofilters feed 8 closed, unheated/unmixed digesters; digested sludge to paddy system.	No dewatering facility, new facility required.	21.46	790	1 070	5.8
Rondebult	PST sludge to anaerobic digesters; gravitates to sludge paddies; supernatant to separate paddies.	No dewatering facility, new facility required.	9.21	10 090	32 600	5.9
Vlakplaats	PSTs and biological reactors feed 12	No dewatering facility, new	114.9	18 870	26 000	2–3.5

Water Care Works	Existing Sludge Management	Dewatering Infrastructure Status	Influent Flow (Ml/d)	Estimated Sludge Discharged (kg/d)	Max Sludge Discharged (kg/d)	Wet Sludge Total Solids (%)
	primary and 12 secondary unheated/unmixed digesters; dried on beds.	facility required.				
Waterval	Primary and secondary sludge; 14 primary + 4 open secondary digesters; 40% to dewatering plant, 60% to paddies.	Existing dewatering plant – upgrade required.	348.79	24 390	88 200	3.65

C3.1.3 DESIGN BRIEF

This workstream applies to the Water Care Works identified by ERWAT where the preferred dewatering technology has already been selected.

The Contractor shall undertake the complete design, supply, manufacture, delivery, installation, testing and commissioning of Rotary Press sludge dewatering systems together with all associated civil, structural, mechanical, electrical, instrumentation, control and architectural works necessary to deliver a fully operational sludge dewatering facility.

Datasheet: These minimum requirements for installed equipment will be applicable during the implementation of the scope of work throughout the term of the contract

The Specifications serve to encompass extent of the proposed works. All details, dimensions and instructions shown on the data sheet quoted herein shall form part of this specification. The following are the MINIMUM Specification for the equipment in this Contract.

No.	Specification	Description
1. General Requirements		
1.1	Performance and reliability	The equipment must be supplied complete, including all elements that guarantee the established performance and reliability criteria. Cake dryness Solids capture rate in filtrate Polymer consumption
1.2	Condition and quality of materials used	All materials must be new and of a quality appropriate to the service to which they will be subjected in the equipment.
1.3	Material type of elements in direct contact with flocculated sludge, cake or filtrate	Minimum 304 Stainless steel or suitable non-corrosive wastewater sludge resistance material.
1.4	Noise level	Not exceed 75 dBA measured at 1 meter from the source
1.5	Interchangeability of parts	All parts of the press or channels are interchangeable.
1.6	Electricity consumption	3-7kWh per ton dry
1.7	Sludge entry orientation	Above the deflector
1.8	Cake exit orientation	Below the deflector
1.9	Wash water requirement	$1m^3$ per channel per day (24 hours)
1.10	Design and construction	All supplied parts must be extensively designed and constructed to withstand the maximum stresses that occur during manufacturing, assembly, and continuous operation.
2. Dewatering channels		
2.1	Mounting of dewatering channels	Mounted on the output shaft of the reduction gearbox.
2.2	Number of dewatering channels per unit	Modular, expandable in individual channel increments to suit the specified capacity requirement, with provision for future capacity increases without replacement of the base unit.
2.3	Interdependence of channels	Channels to be independent of each other and modular
2.4	Diameter of channels	Sized by the manufacturer to achieve the specified throughput and cake dryness performance requirements, subject to ERWAT approval.
2.5	Distance between screens	Sized by the manufacturer to achieve the specified solids capture rate and cake dryness performance criteria.

2.6 Filter Elements		
2.6.1	Material	Made of a thin perforated 316 stainless steel plate.
2.6.2	Anti-clogging	Screens to be with anti-clogging design.
2.6.3	Wash Water	No washing water required during operation.
2.6.4	Wear protection	Chrome plated for wear resistance
2.7 Scrapers		
2.7.1	Number of scrapers per channel	Sufficient number of scrapers per channel to ensure continuous, unobstructed cake removal and screen cleaning.
2.7.2	Material	Stainless steel 304
2.8 Filtration Wheels		
2.8.1	Material	Manufactured from welded stainless-steel ASTM A240 / ASME SA240, Type 304L HRAP or similar.
2.8.2	Thickness and resistance	The fabrication features wall sections with a minimum thickness of 12 mm, designed to withstand internal pressures of up to 2069 kPa
2.8.3	Contact surface finish	The contact surfaces with the seals are made of polished stainless steel with a surface finish of 16 to 32 RMS
2.9 Deflector		
2.9.1	Quantity of deflectors per channel	One
2.9.2	Material	Wear-resistant, low-friction engineering polymer suitable for continuous contact with sludge cake (e.g. molybdenum disulfide-filled nylon or equivalent).
3. Washing system and collectors		
3.1	Washing system	The washing system is purposed to be used for daily cleaning of the inside of the channels and the outside of the filter wheels.
3.2	Manifold composition	Each manifold is manufactured with stainless steel fittings and brass flat jet sprinklers.
3.3	Nozzle set disconnection	All nozzle sets are disconnected from the water supply by means of a quick disconnect system and the system can be easily disassembled from the outside.
3.4	Back flow prevention	The system is equipped with a check valve to prevent backflow of sludge into the washing system.
3.5 Channel Wash		
3.5.1	Attachment	The channel wash assembly is attached to a mounting plate that is screwed and sealed to the channel gland cover.
3.5.2	Number and location of inner channel wash assemblies	One washing assembly per channel is located inside the canal, at the sludge inlet.
3.5.3	Composition	Composed of a set of stainless-steel pipes fitted with a sufficient number of stainless-steel discharge sprinklers to ensure full internal channel coverage.
3.5.4	Number and location of outer channel wash assemblies	Washing assemblies are provided for each filter wheel, fitted with a sufficient number of sprayers to ensure full coverage, located between the filter wheels and the gland covers.
3.6 Filtrate Collector		
3.6.1	Attachment method	Removable type filtrate collector
3.6.2	Material	Made with linear low-density polyethylene (LLDPE).
3.6.3	Diameter	Sized by the manufacturer to accommodate the design filtrate flow rate.
3.6.4	Number of sampling ports	Two (2) sampling ports per collector
3.6.5	Sampling accessibility	The sampling port is closed with a removable plug.
3.6.6	Connection type between collector and manifold	Each filtrate collector connects to a manifold with a flexible connection.
3.6.7	Manifold material and size	Manufactured from schedule 80 PVC pipe or equivalent,

		sized to accommodate the design filtrate flow rate.
3.6.8	Manifold orientation	The manifold outlet can be oriented towards either side of the longitudinal axis of the dewatering technology to optimize distribution
3.7 Sludge Feed collector		
3.7.1	Factory installed fitting and joint types	Grooved-end mechanical pipe couplings suitable for factory-installed sludge feed lines (e.g. Victaulic or equivalent).
3.7.2	Field installed fitting and joint type	Quick-connect, groove-less mechanical couplings suitable for field-installed (butt-fit) joints where grooving is impractical (e.g. Victaulic or equivalent).
4. Flocculator		
4.1	Tank capacity	Sized by the manufacturer to provide adequate flocculation retention time for the design sludge feed rate.
4.2	Tank pressure rating	Flocculation tank pressure of 690 kPa
4.3	Maximum temperature	Maximum flocculation tank temperature of 60 °C
4.4	Pipe and fittings pressure rating	The flocculated sludge pipe and its fittings are designed to withstand a pressure of 690 kPa
4.5	Flocculator to channel pipe and fitting material	The piping between the flocculator and the dewatering technology is made of schedule 10 stainless steel, conforming to ASTM A-312 TP 316
4.6	Sludge feed pressure to channel	The flocculated sludge is fed at a low and constant pressure not exceeding 50kPa into the channel
4.7	Tank material	The body and bolt-on lid are made of carbon steel with epoxy paint.
4.8	Tank body thickness	Minimum thickness as required to safely withstand the specified tank pressure rating.
4.9	Top cover plate thickness and material	Carbon steel with epoxy paint, minimum thickness as required to safely withstand the specified tank pressure rating.
4.10	Provision for lifting	Adequate lifting points provided to facilitate safe handling of the tank.
4.11	Agitator operation	The flocculator agitator is variable speed, driven by a hollow shaft helical gearmotor.
4.12	Agitator drive details	Variable speed drive sized appropriately for the flocculation duty required, with efficiency class IE3 (or better), 400V, 50Hz, three-phase supply, and recognised international electrical approvals (e.g. CSA, CE, UL or equivalent).
4.13	Lubrication	Equipped with a grease fitting between two lip seals.
4.14	Material of wear sleeve	The shaft seal wear sleeve is made of stainless steel.
4.15	Finish of wear sleeve	The wear sleeve is polished to a surface finish of 16 rms and hardened by nitriding.
4.16	Connections to flocculator	The flocculator has connections for sludge inlet, sludge outlet, wash water connection, polymer connection, and air purge.
4.17	Size and type of sludge connection	Sludge inlet and outlet connections sized to suit the design flow rate, fitted with a mechanical coupling suitable for the application (e.g. Victaulic or equivalent).
4.18	Service and instrumentation connections	The threaded connections for service and instrumentation are located on the flocculator inlet manifold.
4.19	Air vent description	The flocculator is equipped with an air vent located at the top,
4.20	Air vent cleaning	The air vent is connected to the potable water line for occasional backwashing and to the drain line to collect any sludge leakage.
4.21	Air vent material	The flocculator vent is constructed of PVC.
5. Ducts and complementary elements		

5.1 Cake outlet chutes		
5.1.1	Inspection facility	Each cake exit has a chute with an inspection door.
5.1.2	Material	The chute is made of linear low-density polyethylene (LLDPE).
5.1.3	Cake sensor mounting	Provision is made for mounting the cake sensor, and a side support to facilitate the installation of the safety sensor.
5.2 Dewatering technology base		
5.2.1	Material	Manufactured from curved steel plate, painted with epoxy paint, of a thickness sufficient to provide adequate structural rigidity.
5.2.2	Shape and function	The base has a compact shape to optimize rigidity and distribute the load evenly over the supporting floor.
5.2.3	Rotation prevention	The base's anti-rotation fixings are integrated into the base for easy installation
5.3 Gland covers, bushings and seals		
5.3.1	Gland cover orientation	Each gland cover is identical and functions as a gland to keep the seal in its correct position.
5.3.2	Gland cover material and construction	Manufactured from fiberglass or an equivalent engineered composite, of sufficient thickness and layup to provide adequate structural strength and wear resistance.
5.3.3	Gland cover function	The lid compresses the UHMW gland seal between the housing and the filter wheel while directing filtrate flow.
5.3.4	Drainage	The lid has an outlet in the lower section to drain the filtrate.
5.3.5	Wash water connection	Provision for connecting the water system of the external wheel washer and the air purge device.
5.3.6	Inspection	There is an opening for inspection or maintenance at the rear of the cover for easy access.
5.3.7	Number of bushings and material	There are two (2) UHMW bushings as guides for the gland cover on the filter wheel.
5.3.8	Method of sealing	Sealing achieved by means of lip seals and O-rings sufficient to prevent leakage between the bushings, filter wheel and gland cover.
5.4 Fasteners and bolts		
5.4.1	Fastener standards	The fasteners are manufactured in accordance with ANSI/ASME B18 standards or equivalent
5.4.2	Bolt and nut specification for the following:	ASTM F738M stainless steel bolts and ASTM F836M stainless steel nuts (property class A1-50 for both or the same) are used for the following assemblies:
5.4.3	Bolt and nut specification for the following:	- Channel casings
5.4.4	Bolt and nut specification for the following:	- Bushing caps for channel housing
5.4.5	Bolt and nut specification for the following:	- Filter manifold to channel housing
5.4.6	Bolt and nut specification for the following:	- Sludge inlet from the channel to the channel casing
5.4.7	Bolt and nut specification for the following:	- Anti-rotation plate for the channel housing
5.4.8	Bolt and nut specification for the following:	- Lifting devices for the channels
5.4.9	Bolt and nut specification for the following:	- Wash water system support to the cable gland cover
5.4.10	Bolt and nut specification for the following:	- Deflector
5.4.11	Bolt and nut specification for the following:	- Inner bushing of the cable gland cover hub
5.4.12	Bolt and nut specification for	- Sludge transition inlet

	the following:	
5.4.13	Bolt and nut specification for the following:	- Anti-rotation plate of the channel
5.4.14	Bolt and nut specification for the following:	- Flocculator inlet and outlet pipe
5.4.15	Bolt and nut specification for the following:	- Flocculator
5.4.16	Bolt and nut material for base assemblies	ASTM F568M steel-clad bolts and ASTM F563M steel-clad nuts (class 4.6 or equivalent) are used for all reduction gearbox-to-base assemblies
5.4.17	Special maintenance tools	Special maintenance tools (e.g. torque wrenches, lifting attachments) required for the installation and maintenance of the equipment shall be supplied.
6. Valves and fittings		
6.1	Valves specifications	All valves must be compatible with the nominal operating pressures of the different systems and be designed to withstand the operating temperatures and the fluids contained.
6.2	Valve sizes	The valves must have the same diameter as the pipe, unless otherwise specified.
6.3 Automatic sludge feed and recirculation valve		
6.3.1	Type	The sludge feed and recirculation valve is a full-bore two-way ball type.
6.3.2	Number and location of valves	Two pneumatic valves will be installed in the sludge line, between the dewatering technology and the flocculator.
6.3.3	Diameter	The valve diameter is 3" (76mm)
6.3.4	Flange specification	The flanged connection is ANSI B16.10 class 125, raised face
6.3.5	Body material	Cast iron
6.3.6	Ball Material	Teflon.
6.3.7	Seat ring material	RPTFE 15% GF
6.3.8	Drive mounting flange conformance	ISO 5211
6.3.9	Solenoid material and IP rating	The solenoid valve body of the actuating mechanism will be made of anodized die-cast aluminium and will have an IP65 insulation rating.
6.3.10	Working pressure	The working pressure will be between 200 and 800 kPa
6.4 Channel isolation valve		
6.4.1	Number of isolation valves per channel	One two-way full-bore ball valve will be installed for closing.
6.4.2	Diameter	The valve diameter is 3" (76mm)
6.4.3	Flange specification	The flanged connection is ANSI B16.10 class 125, raised face
6.4.4	Body material	Body material: Cast iron
6.4.5	Ball material	The ball material is Teflon.
6.4.6	Drive mounting flange conformance (optional when automated)	Drive mounting flange conforms to ISO 5211
6.4.7	Solenoid material and IP rating (optional when automated)	The solenoid valve body of the actuating mechanism will be made of anodized die-cast aluminium and will have an IP65 rating.
6.5 Channel washing water valve		
6.5.1	Number of valves	One pneumatically actuated valve to be installed to control the wash water to each channel.
6.5.2	Valve type	The valve will be a two-way, full-bore ball valve.
6.5.3	Diameter	The valve diameter is 1" (25mm)
6.5.4	Material	The body material is 316 stainless steel
6.5.5	Solenoid type	The solenoid is of the pneumatic spring return type
6.5.6	Material of solenoid	The solenoid valve body of the actuating mechanism will be made of anodized die-cast aluminium and will have

		an IP65 rating.
7. Main Drive system		
7.1 Reduction Gearbox		
7.1.1	Support and gear type	With leg support with spiral and helical bevel gears
7.1.2	Manufacturing standard	Manufactured in accordance with ANSI/AGMA 6010 standard
7.1.3	Casing material	Cast iron casing to ASTM A536
7.1.4	Bevel gear quality	The bevel gears have a minimum quality of AGMA class 9
7.1.5	Helical gear quality	Helical gears have a minimum quality of AGMA class 11
7.1.6	Output shaft material and specification	The output shaft is made of 304 stainless steel with a minimum performance of 415 MPa
7.1.7	Minimum shaft diameter	Sized by the manufacturer to safely transmit the required torque for the number of channels installed.
7.1.8	Gearbox base material	The base of the reduction gearbox is made of steel epoxy paint coated.
7.1.9	Contact with filtrate and cake	The parts and components of the reduction gearbox, including the gearbox seals, are isolated from the filtrate or sludge cake.
7.1.10	Output seal type	The output seal is an integral part of the speed reducer housing; no bolted-on output covers causing leaks, shaft misalignment, or gear misalignment.
7.1.11	Shaft supports for 6 and more channels	Shaft supports installed between the two initial channels and the two final channels
7.1.12	Shaft support material	The shaft supports are made of carbon steel and painted.
7.2 Motor		
7.2.1	Voltage	400V, 50Hz, three-phase
7.2.2	Speed	4-pole, 1500rpm
7.2.3	kW rating	Sized appropriately to the number of dewatering channels installed and the required duty, in accordance with the manufacturer's standard power rating schedule.
7.2.4	Specification	The motor is totally enclosed and fan-cooled (TEFC) of required kW for number of channels, flange "C", IEC 60034-30-1, efficiency class IE3, service factor 1.15, insulation class "F", design "B". It must have a minimum IP65 protection rating.
7.2.5	Coupling	The electric motor is directly coupled to the reduction gearbox via "Nema C" flange
8. Coatings, materials and welding		
8.1 Painting and Protection		
8.1.1	Preparation of the surfaces of non-wet components made with carbon steel	Prepared by near-white sandblasting according to SSPC-SP6 for equipment
8.1.2	Primer and colour	A polyamide epoxy primer is used (e.g. Sherwin-Williams Macropoxy® 646 or equivalent), in IFI Blue.
8.1.3	Primer Solvent	The solvent used shall be compatible with the specified primer system (e.g. Sherwin-Williams reference SW15 or equivalent).
8.1.4	Primer thickness	The primer is applied to a minimum dry film thickness of 203 µm.
8.1.5	Topcoat material	The topcoat is a high-solids acrylic polyurethane coating (e.g. Sherwin-Williams Acrolon® 7300 or equivalent), in IFI Blue.
8.1.6	Topcoat solvent	The solvent used shall be compatible with the specified topcoat system (e.g. Sherwin-Williams reference SW58 or equivalent).
8.1.7	Topcoat thickness	The finish is applied to a dry thickness of 51 to 76 µm
8.2 General Materials		
8.2.1	The equipment components	Unpainted stainless steel.

	that operate in humid conditions	
8.2.2	The equipment components made from polymers based on petroleum products	Not painted.
8.2.3	The equipment piping compliance	ANSI 304L, ASTM A-269 or ASTM A 312 standards or equivalent
8.2.4	The structural form elements of the equipment compliance	Comply with CSA G40.21 - 50W standards (equivalent in the USA to ASTM A -572) or equivalent
8.2.5	The equipment manufactured from sheet material	Complies with ASTM A569 standard or equivalent
8.2.6	The equipment shaft material	Complies with ANSI-1045 standard or equivalent
8.2.7	The stainless-steel components of the equipment	The stainless-steel components of the equipment comply with ANSI 304L and ANSI 316L standards or equivalent
8.3 Welding		
8.3.1	Exposed welds finish	Exposed welds must be ground smooth to form a uniform and neat fillet without weakening the base metal
8.3.2	Equipment welding compliance	The welding used on all equipment complies with AWS Standard, CSA Standard W59 or equivalent
8.3.3	Design standards	The design of all support structures, platforms, and bracing must comply with AISC standards.
8.3.4	Structural welding compliance	Structural welding shall comply with the American Welding Society Structural Code D1.1-82.
8.3.5	Structural design standards	The structural design must comply with AISC C206 Standards.
8.3.6	Weld reinforcement compliance	The weld reinforcement must comply with the AWS code.
9. Technical documents requested with product delivery		
9.1	Data sheets	Data sheets with description of the proposed equipment, size, length, type, capacity, layout, construction materials, engine size, engine type and equipment weight, etc.
9.2	List of components and accessories	Detailed list of components and accessories that will be supplied with the equipment.
9.3	Catalogue, drawings and specifications	Catalogue, drawings and specifications of the equipment components, indicating the main dimensions, parts, construction materials, material thickness and other information to subsequently perform the maintenance and operation of the equipment
9.4	Design loads	A document must be provided showing the design loads that will be transmitted to the foundations or supports.
9.5	Spare parts	Proposals for typical spare parts for the equipment with technical documentation and drawings for their acquisition
9.6	List of packaging, O-rings and interchangeable parts with materials and designations	List of packaging, O-rings and interchangeable parts with materials and designations
9.7	Safety data sheets	Safety data sheets for chemicals and elements that must be disposed of in a special way from the equipment
9.8	Manuals	Complete and detailed Operation and Maintenance manual

The proposed technology must comply with the following **MINIMUM** design parameters:

i. The dewatering system must be able to operate at varying solids concentrations ranging between 0.35% and 10% sludge feed concentration.

ii. Dewatering technology units must achieve a minimum cake dryness of 14%, with a maximum active polymer dose of 10 kg/tonne DS dewatered for plants sized <10 Ml/d, and 20 kg/tonne DS for plants sized >10 Ml/d.

iii. The capture rate shall be at least 92%, and energy usage shall not exceed 7 kWh/tonne dry solids.

iv. The proposed dewatering technology shall be modular in design and capable of accommodating future capacity increases through the addition of dewatering modules or equivalent equipment, without requiring the replacement of the existing system or major modifications to the installed infrastructure.

Annexures

C3.2 ENGINEERING

- Contractor's Design, Drawings and Information to be provided

These requirements list below will be implemented as part of the service level agreement (SLA)

The following must be provided by the Contractor

VENDOR INFORMATION AND DOCUMENT REQUIREMENT LIST	
DESCRIPTION	**WHEN REQUIRED**
Project Programme	Order + 1 Week
Design calculations calculation of the cable conductor size	Tender document and data book
Equipment brochures	Tender document and data book
Design calculations for the equipment	Order + 3 weeks and data book
GA drawings	Order + 3 weeks and data book
Schematic diagrams	Order + 3 weeks and data book
Foundation/Concrete Plinth details	Order + 3 weeks and data book
Manufacturing program	Order + 3 weeks
Manufacturing quality control plan	Order + 3 weeks and data book
Installation quality control plan	Order + 6 weeks and data book
Installation risk assessment and method statement including safe work procedure.	Order + 6 weeks and data book
Performance test certificate	data book
Electrical test certificate (including COC)	data book
Vendors cert. of conformance if any	data book
Operating / maintenance manual	data book
Progress Reports	Bi-Weekly

Note 1:

The Programme shall identify all major activities, principal items of plant and equipment and their components. The following activities and their duration shall, in addition to the requirements of the Conditions of Contract, form the minimum basis for the preparation of the Programme:-

- Insurance Bond and general obligations
- Design
- Plant equipment and arrangement drawings
- Project Quality Plan
- Schedules

- HAZOPS
- Procurement
- Inspection and works testing
- Delivery
- Installation
- Adjustment
- Testing
- Commissioning
- Defects Notification Period

Note 2:

The Contractor shall provide a monthly progress report to the Engineer. The report shall cover at least the following aspects:

- progress of various activities in comparison to original program
- attainment of key milestones
- list of purchase orders placed
- names and positions of key personnel working on the project
- staffing levels on site (when site work commences)
- identification of any aspects needing to be addressed by the Employer or the Engineer

- **Drawings**
- **Contractors Drawings**

The contractor appointed to carry out the work shall produce a comprehensive set of detailed design drawings suitable for issue for construction as well as detailed shop drawings, prior to manufacture of equipment. They shall also be responsible for As-Built drawings and operating and maintenance manuals on completion.

The following electrical drawings shall be provided:

- Generator GA Drawing
- Detailed cable layout routes
- Wiring and Termination schedules as required for construction
- Equipment schedules
- Equipment Data Sheets

C3.3 CONSTRUCTION

C3.3.1 Standards

It shall be the responsibility of the Contractor to obtain, at his own expense, the most recent copies of the relevant editions of the documents referred to.

The Contractor shall keep copies of the Standard Specifications, copies which are available from the South African Bureau of Standards.

For the purpose of this Contract the following Standard Specifications shall apply to all items supplied and does not form part of the evaluation process:

The Standard Specifications for all associated civil work applicable to this Contract shall be:

SANS 1200 A: Preliminary and general

SANS 1200 AA: General (small works)

SANS 1200 C: Site Clearance

SANS 1200 DA: Earthworks (small works)

SANS 1200 MM: Ancillary Works

In addition, there shall be compliance with:

- The Occupational Health and Safety Act
- Regulations of the Supply Authority
- Local Authority by-laws
- Regulations of the Fire office
- Telecommunications legislation

C3.3.2 Site establishment

C3.3.2.1Services and Facilities provided by the Employer.

1. Water Sources

There is a potable water supply available. The Site has a water reticulation system which connects directly to a Rand Water supply main. The Contractor will be responsible for supplying all pipework required to convey the water to the Works and for all associated fittings including for an isolating valve and approved water meter. He will further be responsible for paying a proportionate share of the water consumption charges at the ruling tariff at the time of using the water. The Contractor shall regulate his usage of water so as not to inconvenience other users and if necessary supply and erect a storage tank of sufficient capacity to even out unacceptable peak demands. The connection may only be made on the written consent of the Engineer after he is satisfied

that the Contractor has made all the necessary and proper arrangements for receiving the water. No warranty is offered or given by the Employer that the existing available reticulated water supply will be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

Final effluent may be used for water testing of structures and pipelines and shall be available downstream of the final clarifiers or, subject to the Engineers approval, the pressurized reticulation system. The Contractor shall be responsible for supplying all pumps pipe work, tanks and for all associated fittings and he shall not interfere in anyway with the normal operation of the plant. Any temporary works which are approved by the Engineer shall be removed on completion and any damage resulting from his activities, repaired by the Contractor, at his own cost, to the satisfaction of the Engineer.

As the Site is situated on dolomitic strata no leakage or indiscriminate discharge of water will be permitted on or about the Works and failure on the part of the Contractor or his employees to observe this requirement will result in the termination of water supplies until such time as any shortcomings in this regard are rectified.

2. Electricity Supply

The Site is provided with ESKOM power. One or more 380 V 50 Hz power supply points can be made available to the Contractor. The Contractor will be responsible for supplying his own distribution and meter board at each point and cabling to the positions of usage. He shall also be responsible for paying all costs of work required to be carried out by ERWAT in providing the connection and subsequent removal on completion of the Contract and for paying his proportionate share of the electricity charges at the tariff ruling at the time of using the power. The contractor shall be responsible for providing an installation which complies in all respects with the standing regulations of the supply authority. Failure on the part of the Contractor to observe these requirements or maintain his installations in terms therefore will result in the termination of electrical power supplies until such time as any shortcomings in this regard are rectified.

No warranty is offered or given by the Employer that the existing available electricity supply will be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

3. Sanitary Services

No sanitary services are available for use by the Contractor at the site.

4. Telephone Services

To be provided by Contractor

5. Area for Contractor's Site Establishment

The proposed site of the Contractor's offices, workshops, stores and plant yard will be indicated on site, if requested.

C3.3.2.2 Facilities provided by the Contractor

The Contractor is required to provide a construction camp including offices, workshop, materials, store,

sanitary facilities, offices and equipment for his own use as required.

C3.3.3 Site Usage

The Contractor; his personnel; and his subcontractors; and suppliers; shall confine their activities to the demarcated site of the Works and the direct access roads thereto. Temporary routes shall be subject to the written approval of the Engineer and be subject to the applicable Standardized Specifications.

C3.4 MANAGEMENT OF THE WORKS

- **Planning and Programming**

The programme referred to in the General Conditions of Contract shall be a network- based programme in accordance with the precedence method; a detailed cash flow graph indicating projected monthly invoice amounts shall also be provided. The critical path of the programme of work shall be clearly indicated and the programme monitored continually and updated monthly by the Contractor in accordance with his progress.

(1) In compiling the programme of work, the Contractor shall incorporate the following important specific requirements and constraints:

(a) The identification and marking of affected services prior to commencing construction works.

(b) The requirements of the Environmental Management Plan (EMP) as specified in the relevant sections of the Particular Specifications and the requirements in respect of inspections and community liaison.

(c) The requirements of the Occupational Health Safety (OHS) Act of 1993 and the Construction Regulations, 2014.

(d) The relocation of services.

(e) An allowance to accommodate "normal" rain days.

(2) The programme submitted shall include at least the following details:

(a) A work breakdown structure identifying the major activity groups.

(b) The critical path shall be indicated and floats on non-critical activities shall be shown.

(c) The working hours per day, week and month allowed for in the programme with details of resource allocations per activity.

(d) Production rates for key activities, e.g. engineering, fabrication, delivery, installation, commissioning, etc.

(3) In addition, the Contractor shall submit to the Engineer at monthly intervals a progress report indicating

the following details:

(a) Work completed in previous month and total progress to date, per activity.

(b) Activities behind programme, for which the Contractor shall detail all reasons for such delays as well as the measures to be implemented to make up delays.

(c) A GANTT chart showing the original programme, the latest approved version of the programme, actual progress achieved and revised completion sates, if and when applicable.

Failure to comply with all of the foregoing requirements shall entitle the Engineer to use a programme based on his own assumptions to evaluate claims for extension of time for completion of the works, or for additional compensation.

- **Quality Management**

The requirements for Quality Management to be executed under the Contract are set out in Standard Specifications – Section A.

- **Interpretations**

C. Abbreviations

In this Specification, the following abbreviations will apply: These specifications will be applicable to equipment delivered and will not form part of the evaluation process.

- **Location of the Works**

ERWAT WCW	Stand/ Farm Positioned	Street Name	Co-ordinates
Drainage District 3			
Esther Park	Park 753, Esther Park, Extension	R25	26°06'02.43" S, 28°10'57.80" E
Hartebeestfontein	Portion 20 & Remaining of Portion 4 of farm Hartebeestfontein 17	Bapsfontein Road, Norkem Park, Kempton park	26°01'11.58"S, 28°17'04.80" E
Olifantsfontein	Olifantsfontein 402 IR	Ceramic Road, Olifantsfontein	25°56'24.48" S, 28°12'57.96" E
Rynfield	Portion 75 of Vlakfontein 161	Sarel Cilliers, Rynfield	26°09'31.05" S, 28°21'21.41" E
Benoni	Remaining Portion 6 of Rietfontein	Lancaster Road, Benoni	26°12'30.19" S, 28°19'00.48" E
Drainage District 4			

Ancor	Remaining Extension of Portion 151 farm Daggafontein 125	Ermelo Road, Springs	26°16'08.45" S, 28°29'00.15" E
Daveyton	Daveyton Plot 4	Holfontein Road, Etwatwa	26°08'08.72" S, 28°27'49.20" E
Jan Smuts	Portion 73 of farm Weltevreden 118	Wanderers Street Extension, Brakpan	26°13'24.45''S, 28 22'33.01'' E
JP Marais	Portion 70 of farm Modderfontein 76	Cnr N12 / Kingsway Road	26°10'13.46" S, 28°23'49.21" E
Welgedacht	Portion 81 & 82 of farm Welgedacht	1 Carnation Road Welgedacht AH, Springs	26°11'29.18" S, 28°28'26.86" E
Drainage District 5			
Carl Grundlingh	Portion 58 of farm Varkenfontein 169	Vorsterkroon, Nigel	26°23'17.69" S, 28°28'28.00" E
Herbert Bickley	Portion 13 of farm Maraisdrift 190	Heidelberg Road, Maraisdrift, Nigel	26°26'40.37" S, 28°26'46.89" E
Heidelberg	Portion 28 of farm Boschhoek 385	Vaaldam Road, Heidelberg	26°32'22.59" S, 28°19'48.93" E
Ratanda	Nooitegedacht 390	Vaaldam Road, Ratanda	26°34'57.80" S, 28°18'11.27" E
Tsakani	Portion 22 of farm Vlakfontein 161	Cnr Modjadji and khama Streets	26°22'31.93" S, 28°21'58.20" E
Drainage District 6			
Dekema	Portion 10 of Katlehong 151	Brickfield Road, Motsamai Section	26°19'36.94" S, 28°09'48.25" E
Rondebult	Remaining Portion 27 Rondebeult 136	Cnr Kalk/ Van dyk Road, Rondebult	26°17'57.92" S, 28°13'37.82" E
Vlakplaats	Portion 191 farm of Vlakplaats 138	Cnr Brickfield / Bierman Street, Vosloorus	26°20'47.85" S, 28°10'55.11" E
Waterval	Portion 50,62,12 and 1 of farm Waterval 150 and Remaining portion 3 of the farm Witkop	Waterfal Farm, Meadow Road, kliprivier	26°26'14.12" S, 28°06'03.55" E

ERW2610/05: THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHS FOR A PERIOD OF THIRTY-SIX (36) MONTHS
CONTENTS

C3.5.1 INTRODUCTION AND BACKGROUND

C3.5.1.1 Background to the construction Health and Safety Specification
C3.5.1.2 Purpose of the construction Health and Safety Specification

C3.5.2 HEALTH AND SAFETY SPECIFICATION

C3.5.2.1 Scope
C3.5.2.1.2 Provision for Health & Safety Cost

C3.5.2.2 Interpretations
C3.5.2.2.1 Application
C3.5.2.2.2 Definitions

C3.5.2.3 Minimum Administrative Requirements
C3.5.2.3.1 Notification of Intention to Commence Construction Work
C3.5.2.3.2 Assignment of Contractor's Responsible Person to Supervise Health and Safety on Site
C3.5.2.3.3 Competency of Principal Contractor Responsible Persons
C3.5.2.3.4 Compensation of Occupational Injuries and Diseases Act (COIDA) Act 130 of 1993
C3.5.2.3.5 Occupational Health and Safety Policy
C3.5.2.3.6 Health and Safety Organogram
C3.5.2.3.7 Preliminary Hazard Identification and Risk Assessment and Progress Hazard Identification and Risk Assessment
C3.5.2.3.8 Health and Safety Representative(s)
C3.5.2.3.9 Health and Safety Committee(s)
C3.5.2.3.10 Health and Safety Training
C3.5.2.3.10.1 Induction
C3.5.2.3.10.2 Awareness
C3.5.2.3.10.3 Competency
C3.5.2.3.11 General Record Keeping
C3.5.2.3.12 Health and Safety Audits, Monitoring and Reporting
C3.5.2.3.13 Emergency Procedures
C3.5.2.3.14 First Aid Box and First Aid Equipment
C3.5.2.3.15 Accident / Incident Reporting and Investigation
C3.5.2.3.16 Hazards and Potential Situations
C3.5.2.3.17 Personal Protection Equipment and Clothing
C3.5.2.3.18 Occupational Health and Safety Signage
C3.5.2.3.19 Contractors
C3.5.2.3.20 Incentives and Penalties

C3.5.2.3.21 Health & Safety Officer (Part-time)

C3.5.2.4 Physical Requirements

C3.5.2.4.1 Civil Work
C3.5.2.4.2 Excavations / Trenching
C3.5.2.4.3 Confined Spaces
C3.5.2.4.4 Existing Structures
C3.5.2.4.5 Edge Protection and Penetrations
C3.5.2.4.6 Hazardous Chemical Substances (HCS)
C3.5.2.4.7 Stacking of Materials

C3.5.2.5 Plant and Machinery

C3.5.2.5.1 Construction Plant
C3.5.2.5.2 Vessels under Pressure (Gas bottles including Operations)
C3.5.2.5.3 Fire Extinguishers and Fire Fighting Equipment
C3.5.2.5.4 Hired Plant and Machinery
C3.5.2.5.5 Formwork for Structures
C3.5.2.5.6 General Machinery
C3.5.2.5.7 High Voltage Electrical Equipment
C3.5.2.5.8 Portable Electrical Tools / Explosive Power Tools
C3.5.2.5.9 Welding Equipment
C3.5.2.5.10 Public Health and Safety
C3.5.2.5.11 Night Work

C3.5.2.6 Occupational Health

C3.5.2.6.1 Occupational Hygiene
C3.5.2.6.2 Welfare Facilities
C3.5.2.6.3 Alcohol and Other Drugs

C3.5.3 ANNEXURE A TASK COMPLETION FORM
C3.5.4 ANNEXURE B PC RESPONSIBLE PERSON(S)
C3.5.5 ANNEXURE C OTHER REQUIREMENTS
C3.5.6 ANNEXURE D HEALTH AND SAFETY FILE CHECKLIST
C3.5.7 ANNEXURE E ACKNOWLEDGEMENT OF H & S SPECS

C3.5. INTRODUCTION AND BACKGROUND

C3.5.1.1 BACKGROUND TO THE HEALTH AND SAFETY SPECIFICATION

The Construction Regulations 2014 place the onus on the Client to prepare a preconstruction Health and Safety specification, highlighting all risks not successfully eliminated during design setting standards for Health and Safety during construction phase.

C3.5.1.2 PURPOSE OF THE HEALTH AND SAFETY SPECIFICATION

To assist in achieving compliance with the Occupational Health and Safety Act 85/1993 and the promulgated Construction Regulations 2014 in order to reduce incidents and injuries. These specifications shall act as the basis for the drafting of the construction phase Health and Safety plan by the Contractor.

The specification sets out the requirements to be followed by the Principal Contractor and their Contractors so that the Health and Safety of all persons potentially at risk may receive the same priority as other facets of the project e.g. Cost, programmed, environment, quality etc.

C3.5.2 HEALTH AND SAFETY SPECIFICATION

C3.5.2.1 SCOPE

This specification covers the requirements for eliminating and mitigating incidents and injuries on the **ERW2610/05: THE APPOINTMENT OF A SERVICE PROVIDER/S FOR THE DESIGN AND IMPLEMENTATION OF SLUDGE DEWATERING SOLUTIONS AT VARIOUS ERWAT WATER CARE WORKS ON AN 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY-SIX (36) MONTHSS) FOR 36 MONTHS**

The scope also addresses legal compliance, hazard identification and risk assessment, risk control and promoting a Health and Safety culture amongst those working on the project. The specification also makes provision for the protection of those persons other than employees.

C3.5.2.1.2 Provision for Health & Safety Cost

The Principal Contractor must make adequate provision for the cost of Health & Safety Measures during the construction process as required by the Construction Regulation 5(1)(g).

The health and safety cost will be recovered from the provisional sum allocated for this purpose.

C3.5.2.2 INTERPRETATIONS

C3.5.2.2.1 APPLICATION

This specification is a compliance document drawn up in terms of the South African legislation and is therefore binding. It must be read in conjunction with relevant legislation as noted previously.

C3.5.2.2.2 DEFINITIONS

The definitions as listed in the Occupational Health and Safety Act 85/1993 and Construction Regulations 2014 shall apply.

C3.5.2.3 MINIMUM ADMINISTRATIVE REQUIREMENTS

C3.5.2.3.1 NOTIFICATION OF INTENTION TO COMMENCE CONSTRUCTION WORK

The Principal Contractor shall notify the provincial Director of the Department of Employment and Labour in writing that construction work commences.

C3.5.2.3.2 ASSIGNMENT OF CONTRACTOR'S RESPONSIBLE PERSONS TO SUPERVISE HEALTH AND SAFETY ON SITE

The Principal Contractor shall submit supervisory appointments as well as any relevant Appointments in writing (as stipulated by the OHS Act and Construction Regulations), prior to commencement of work. Proof of competency must be included. See annexure B.

C3.5.2.3.3 COMPETENCY FOR CONTRACTOR'S APPOINTED COMPETENT PERSON

The Principal Contractors' competent persons for the various risk management portfolios shall fulfil the criteria as stipulated under the definition of Competent in accordance with the Construction Regulations 2014. Proof of competence for the various appointments must be included.

C3.4.5.3.4 COMPENSATION OF OCCUPATIONAL INJURIES AND DISEASES ACT 130 OF 1993 (COIDA)

The Principal Contractor shall submit a letter of good standing from their Compensation Insurer-FEM or Compensation Commissioner to the Client's Representative as proof of registration. Contractors shall submit proof of registration to their Contractor before they commence work on site.

The Principal Contractor shall ensure that the letter of good standing is kept valid for the duration of the contract period.

C3.5.2.3.5 OCCUPATIONAL HEALTH AND SAFETY POLICY

The Contractor and their Contractors shall submit a Health and Safety policy signed by

their Chief Executive Officer. The Policy must outline objectives and how they will be achieved and implemented by the Company / Contractor.

C3.5.2.3.6 HEALTH AND SAFETY ORGANOGRAM

The Principal Contractor and their Contractors shall submit an organogram, outlining the Health and Safety site Management Structure including the relevant appointments / competent persons. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram shall be updated when there are any changes in the site Management Structure.

C3.5.2.3.7 PRELIMINARY HAZARD IDENTIFICATION AND RISK ASSESSMENT AND PROGRESS HAZARD IDENTIFICATION AND RISK ASSESSMENT

- Roof Work
- Mobile Cranes Management System
- Mechanical
- Working at heights, as per CR8 – Fall Protection Plan, Scaffolding Management
  - Person falling
  - Material falling
  - Protection of decking edges, finished floor slab edges, stairways, floor penetrations, lift shafts, any other openings and areas from where persons may fall.
- Excavations
  - Collapse of Walls
  - People/Equipment falling in Excavations
  - Shoring
  - Underground services
  - Drainage
  - Pipe-Jacking operations
- Confined Space entry
- Formwork and Support Work
  - Casting of Concrete
- Manual and Mechanical Handling o Lifting and placement of pipes o Overhead works
- Noise Control
- Dust Control

Principal Contractor to ensure that these risk assessments as well as other risks identified by them are updated monthly or as the risk change and communicated to all relevant parties. CR 9(3).

C3.5.2.3.8 HEALTH AND SAFETY REPRESENTATIVE(S)

The Principal Contractor and their Contractors shall ensure that Health and Safety Representative(s) are appointed under consultation and trained to carry out their functions. The appointment must be in writing.

The Health and Safety Representative shall carry out regular inspections, keep records and report all findings to the Responsible Person forthwith and at Health and Safety meetings

C3.5.2.3.9 HEALTH AND SAFETY COMMITTEES

Principal Contractor shall organize monthly Health & Safety meetings. Minutes and records shall be kept. Principal Contractors Health & Safety representative and responsible person shall attend this meeting.

C3.5.2.3.10 HEALTH AND SAFETY TRAINING

C3.5.2.3.10.1 Induction

Principal Contractor shall ensure that all undergo site-specific induction presented by a competent person and proof of it too.

C3.5.2.3.10.2 Awareness

The Principal Contractor shall ensure that, on site, periodic toolbox talks take place at **least once per week**. These talks should deal with risks relevant to the construction work at hand. A record of attendance shall be kept in the Health and Safety file. All Principal Contractor have to comply with this minimum requirement.

C3.5.2.3.10.3 Competency

All competent persons shall have the knowledge, experience, training and qualifications specific to the work they have been appointed to supervise, control, and carry out. This will have to be assessed on a regular basis e.g.

Periodic audits by the Client's Health & Safety Agent, progress meetings, etc. The Contractor is responsible to ensure that competent Contractors are appointed to carry out construction work.

C3.5.2.3.11 GENERAL RECORD KEEPING

The Principal Contractor and their Contractors shall keep and maintain Health and Safety records to demonstrate compliance with this Specification, with the OHS Act 85/1993, and with the Construction Regulations 2014. The Principal Contractor shall ensure that all records of incidents / accidents, emergency procedures training, inspections, audits, etc. are kept in a Health and Safety file held in the site office.

The Health and Safety File shall be submitted for approval prior to commencement of work and Annexure D shall be used to evaluate the file.

The Principal Contractor must ensure that every sub-Contractor keeps its own Health and Safety file, maintains the file and make it available on request (The file must include

the Sub-Contractor's health and safety plan). These records are crucial for inclusion in the Principal Contractors' consolidated health and safety file for handover to the Client on completion of construction work.

C3.5.2.3.12 HEALTH AND SAFETY AUDITS, MONITORING AND REPORTING

The Client's Health & Safety Agent shall conduct monthly Health and Safety audits of the work. Operations including a full audit of physical site activities as well as an audit of the administration Health and Safety. *The Principal Contractor is obligated to conduct similar audits on their Contractors.*

Detailed reports of the audit findings and results shall be reported on at all levels of project management meetings / forums. Copies of the Client audit reports shall be kept in the Primary Project Health and Safety file while the Principal Contractor audit reports shall be kept in their file, a copy being forwarded to the Client. Principal Contractor has to audit their Contractors and keep records of these audits in their Health and Safety files, available on request.

C3.5.2.3.13 EMERGENCY PROCEDURES

The Principal Contractor shall compile a comprehensive Evacuation Plan with assemble point and contact details in the case of any emergency supplied by the Client's Health & Safety Agent.

C3.5.2.3.14 FIRST AID BOXES AND FIRST AID EQUIPMENT

The Principal Contractor and their Contractors shall appoint in writing First Aider(s). The appointed First Aider(s) are to be sent for accredited first aid training. Valid certificates are to be kept on site. All Principal Contractor with more than 5 employees shall supply their own first aid box. Principal Contractor with more than 10 employees shall have trained, certified first aider on site at all times & First aid Box adequately stocked at all times.

C3.5.2.3.15 ACCIDENT / INCIDENT REPORTING AND INVESTIGATION

Injuries are to be categorized into first aid, medical, disabling and fatal. The Principal Contractor must stipulate in its construction phase Health and Safety plan how it will handle each of these categories. When reporting injuries to the Client, these categories shall be used. All contractors must investigate and report on the 4 categories of injuries to the Principal Contractor at least monthly. Contractors must investigate injuries and accidents involving their employees within seven days of the incident in the form on Annexure1 (General Administrative Regulations) and forward a copy on the investigation report to the principal contractor forthwith. **All incidents reportable in terms of the provision of Section 24 of the OHS Act 1993 must be reported to the local Dept. of Employment and Labor in the prescribed manner.**

The Principal Contractor must report all injuries to the Client in the form of a spreadsheet, which includes all contractor injuries/incidents and man-hours worked for the month as well as the cumulative total. This report must be done on a monthly basis

and must form part of the Principal Contractor's progress report.

C3.5.2.3.16 HAZARDS AND POTENTIAL SITUATIONS

The Principal Contractor shall immediately notify the Client's Health & Safety Agent of any hazardous or potentially hazardous situations that may arise during the performance of construction activities.

C3.5.2.3.17 PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING

The Principal Contractor shall ensure that all workers are issued and wear hard hats, protective footwear and overalls. The Principal Contractor and their Contractors shall make provision and keep adequate quantities of SABS or SANS approved PPE on site at all times.

C3.5.2.3.18 OCCUPATIONAL HEALTH AND SAFETY SIGNAGE

The Principal Contractor shall provide adequate on-site OHS signage. Including but not limited to: "no unauthorized entry", "report to site office", "site office", and "hardhat area". Signage shall be posted up at all entrances to site as well as on site in strategic locations e.g. Access routes, entrances to structures and buildings, scaffolding and other potential risk areas / operations. All Contractors to adhere to it.

C3.5.2.3.19 CONTRACTORS

The Principal Contractor shall ensure that all Contractors appointed by them comply with this Specification, the OHS Act 85/1993, and Construction Regulation 2014.

The Principal Contractor may only appoint a sub-contractor after approving the sub-contractor's health & safety plan. The Principal Contractor must audit each of its Contractors on a monthly basis, with audit reports filed in the health & safety file on site. The audit must include an administrative assessment as well as a physical inspection of the contractor's health & safety system.

The Principal Contractor must stop any Contractor from carrying out construction work that is not in accordance with the Principal Contractor's or Contractor's health & safety plan or if there is an immediate threat to the health and safety of persons.

The Principal contractor shall take all reasonable steps necessary to ensure co-operation between all Contractors to enable each of those Contractors to comply with the provisions of these regulations;

The Principal Contractor must ensure that their Contractor is registered and in good standing with a recognized compensation fund or with a licensed compensation insurer prior to work commencing on site;

The Principal Contractor must ensure that potential Contractors submitting tenders have made provision for the cost of health and safety measures during the construction process; The Principal Contractor shall discuss and negotiate with their Contractor the

contents of the health and safety Plan and shall finally approve that plan for implementation;

C3.5.2.3.20 PENALTIES

Penalties may be imposed for ongoing non-compliance to the provisions of the Client's Health and Safety specification and Principal Contractors' health & safety plans. The penalty procedure shall consist of a written warning with a compliance time frame. **Failure to comply within the time frame stipulated would result in a R1000 penalty per non-compliance item per day that the non- compliance persists.**

C3.5.2.3.21 A HEALTH AND SAFETY OFFICER CR 8(5)

Subject to the applicable regulations in relation to the activities the Principal Contractor shall provide a full-time or part-time safety officer on site and proof of their competency to be attached to their appointment.

C3.5.2.4 PHYSICAL REQUIREMENTS

C3.5.2.4.1 CIVIL WORK

Principal Contractor to ensure that the Contractor complies with Construction regulation 21 and that the following is undertaken during civil work:

- A competent site supervisor to be on site at all times.
- Plant and equipment inspected daily and registers kept.
- All employees performing construction work shall have a valid medical certificate of fitness issued by an Occupational Health Practitioner.
- All operators of plant and vehicles: trained, competent and physically and psychologically fit. Certificates to be put in their Health & Safety File.
- Workers that are working close to the traffic to be visible and are to wear reflective vests.
- Adequate safety signage to be posted ahead of any work area in the road.
- All signage, including delineators to be maintained and kept clean at all times.
- The required PPE must be worn at all times (Hard hats, safety shoes, overalls, etc.)
- Risk assessments to be conducted on all high-risk activities.
- Speed reduction road signs to be posted.
- Dust control practices used to limit dust generation.

Laying of pipes / Backfilling

- A competent site person to supervise lifting operations at all times.
- No employee to stand under any suspended loads.
- Loads must not be slewed over personnel, plant, site huts or property.
- All lifting equipment and accessories must be marked with the Safe Working Load.

- Slings must not be placed on sharp edges.
- Workers to wear proper PPE at all times.
- Work to be stopped when weather conditions prevent safe operations during trenching work or lying of pipes.
- Everyone to stand clear of any area being backfilled by mobile plant.

C3.5.2.4.2 EXCAVATIONS, SHORING, DEWATERING OR DRAINAGE

The Principal Contractor and any relevant Contractors shall make provision at tendering stage for shoring, dewatering or drainage of any excavations as per this specification.

The Principal Contractor shall make sure that:

- The excavations are inspected before every shift, after any blasting, after an unexpected fall of ground, after any substantial damage to the shoring and after rain, records kept thereof.

- Safe work procedures have been communicated to the workers,

- The safe work procedures are enforced and maintained by the Contractor's Responsible Persons at all times,

- The requirements as per Regulation 13 of the Construction Regulations are adhered to.
- Where pipe-jacking activities are taking place safe work procedures/method statements to be submitted to Client's Health & Safety Agent prior to these activities.

Method statement to be developed where shoring will be done, especially near public roads and also where explosives will be / are used.

C3.5.2.4.3 CONFINED SPACE ENTRY

The Principal Contractor to prepare a confined space procedure in line with General Safety Regulation (5) OHSA Act

C3.5.2.4.4 EXISTING STRUCTURES

Any adjacent structures that may be affected by work must be considered in the planning process. Precautionary measures must be detailed and applied to prevent damage, uncontrolled collapse of existing structures and/or loss to property and persons during the entire construction phase.

C3.5.2.4.5 EDGE PROTECTION AND PENETRATIONS

The Principal Contractor must ensure that all exposed edges and openings are guarded and demarcated at all times until permanent protection has been erected. The Principal Contractors' risk assessment must include these items finished floor slab

edges, floor penetrations, and all other openings and areas where a person may fall.

C3.5.2.4.6 HAZARDOUS CHEMICAL AGENTS (HCA)

The Principal Contractor working with Hazardous chemical substances to obtain copies of all the (SDS) Safety Data Sheets and this is to be kept on site and a copy to be forwarded to Client's Health & Safety Agent.

C3.5.2.4.7 STACKING OF MATERIALS

The Principal Contractor shall ensure that there are sufficient appointed stacking supervisors and that all materials and equipment is stacked and stored safely. Double handling of material should be avoided and for this purpose, pallets and other stacking options should be used.

C3.5.2.5 PLANT AND MACHINERY

C3.5.2.5.1 CONSTRUCTION PLANT

The Principal Contractor shall ensure that all such plant complies with the Requirements of the OHS Act 85/1993 and Construction Regulations 2014. The Principal Contractor shall inspect and keep records of inspections of construction plants used on site. Only authorized / competent persons are to use machinery under proper supervision. Appropriate PPE must be provided and maintained at all times.

C3.5.2.5.2 VESSELS UNDER PRESSURE (VUP) AND GAS BOTTLES

The Principal Contractor shall comply with the Vessels under Pressure Regulations, including:

Providing competency and awareness training to the operators, Providing PPE, Inspect Equipment regularly and keep record of inspections, Provide appropriate firefighting equipment (Fire Extinguishers) on hand.

C3.5.2.5.3 FIRE EXTINGUISHERS AND FIRE FIGHTING EQUIPMENT

The Principal Contractor shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted as required.

C3.5.2.5.4 HIRED PLANT AND MACHINERY

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use. The necessary requirements as stipulated by the OHS Act 85/1993 and Construction Regulations 2014 shall apply. The Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the Health and Safety file. All relevant Contractors must ensure the same.

C3.5.2.5.5FORMWORK AND SUPPORT WORK FOR STRUCTURES

The Principal Contractor shall ensure that the regulation 12 of Construction Regulations 2014 are adhered to. These provisions must include but not be limited to ensuring that all equipment used is examined for suitability before use, that all formwork and support work is inspected by a competent person immediately before, during and after placement of concrete or any other imposed load and thereafter on a daily basis until the formwork and support work has been removed. Records of all inspections must be kept in a register on site.

C3.5.2.5.6 GENERAL MACHINERY

The Principal Contractor shall ensure compliance with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE, and training those who operate the machinery.

C3.5.2.5.7 HIGH VOLTAGE & ELECTRICAL INSTALLATIONS

If high voltage electrical lines are present on the site perimeter, the Contractor must be aware of the location of them and are to demarcate its positions.

These demarcations must be maintained throughout the duration of the construction work. The minimum safety clearances as per Electrical Machinery Regulation 15 must be adhered to**. All installation must comply with SANS 10142 & the regulations of the OHS Act 85/1993 and Construction Regulation 24.**

All temporary electrical installations must be inspected at least weekly.

C3.5.2.5.8 PORTABLE ELECTRICAL TOOLS AND EXPLOSIVE POWERED TOOLS

The Principal Contractor shall ensure that use and storage of all explosive powered tools and portable electrical tools are in compliance with relevant legislation.

The Contractor shall ensure that all electrical tools, electrical distribution boards, extension leads, and plugs are kept in safe working order. Regular inspections and toolbox talks must be conducted to make workers aware of the dangers and the control measures that are to be implemented e.g. Personal protection equipment, guards, etc.

A competent person to undertake routine inspections and records are to be kept on file. Only authorized trained persons are to use the tools, the safe work procedures to apply. Awareness training to be carried out, compliance enforced at all times, and PPE are provided and maintained,

C3.5.2.5.9 WELDING EQUIPMENT

- Only authorized / trained persons to use the equipment.
- The operators are to wear correct PPE - eye/ face/foot/body/respirator.
- Flashback arrestors are to be fitted on cylinders and gauges when using gas welding equipment. Fire prevention methods to be applied.

- Where electric arc welders are used, equipment only to be used in a dry area, protected from wetness.

C3.5.2.5.10 PUBLIC AND SITE VISITOR HEALTH AND SAFETY

Both the Client and the Principal Contractor have a duty in terms of the OHS Act 85/1993 to do all that is reasonably practicable to prevent members of the public and site visitors from being affected by the construction activities. Site visitors must be briefed on the hazards and risks they may be exposed to and what measures are in place or should be taken to control these hazards and risks. A record of these inductions must be kept on site in accordance with the Construction Regulations. Principal Contractor to ensure that no unauthorized personal enter the construction area.

Method statements are to be drafted on traffic management on site, including work near the public.

C3.5.2.5.11NIGHT WORK

Adequate lighting to be provided where required. Personnel should not work alone at night.

C3.5.2.6 OCCUPATIONAL HEALTH

C3.5.2.6.1 OCCUPATIONAL HYGIENE

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and Principal Contractor must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards.
The Risk to be looked at includes:

<u>Ventilation</u>
Adequate ventilation / extraction / exhausting in hazardous areas e.g. chemicals / adhesives / welding / petrol or diesel/ motors running and in confined spaces / basements.

<u>Noise</u>
Tasks identified where noise exceeds 85 dBa. All reasonable steps are to be taken to reduce noise levels. Hearing protection is to be used where noise levels cannot be reduced to below 85 dBa.

<u>Dust</u>
Principal Contractor to ensure that employees working with grinders, saws & jackhammers, etc. are issued with dust masks and dust exposure to be minimized at all times.

C3.5.2.6.2 WELFARE FACILITIES

The Principal Contractor shall ensure that welfare facilities comply with the requirements of regulation 30 of the Construction Regulations (2014).

The Principal Contractor will provide ablution facilities for all on site, including changing facilities & hand-washing facilities. Safe and adequate facilities will be provided. Waste bins must be strategically placed and emptied regularly. Safe and clean storage areas must be provided for workers to store personal belongings and personal protective equipment.

C3.5.2.6.3 ALCOHOL AND OTHER DRUGS

The Principal Contractor is to ensure that no alcohol and other drugs are allowed on site. No person may be under the influence of alcohol or any other drugs while on the construction site. Any person on prescription drugs must inform his/her superior, who shall in turn report this to the Contractor forthwith. Any person suffering from any illness / condition that may have a negative effect on his/her safety performance must report this to his/her superior, who shall in turn report this to the Principal Contractor forthwith.

Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately, to report back the next day for a preliminary inquiry. The Contractor concerned must follow a full disciplinary procedure and a copy of the disciplinary action must be forwarded to the Principal Contractor for his records.

Annexure A

The Principal Contractor must submit compliance with Annexure A within **one week** of receiving this Specification.

HSS Item no.	REQUIREMENT	OHSA REQUIREMENT	SUBMISSION DATE
2.3.1	Assignment of Responsible Persons to manage and supervise Construction work	OHS Act (section 16.2) & Construction Regulation 8(1) and 8(7)	Before commencement on site
2.3.2	Competence of Responsible Persons	OHS Act (section 16.2) & Construction Regulation 6	Together with H & S plan
2.3.3	Compensation of Occupational Injuries and Diseases - Proof of Registration- FEM or CC	COIDA	Together with H & S plan
2.3.4	Occupational Health and Safety Policy	OHS Act	Together with H & S plan
2.3.5	Health and Safety Organogram	Client Requirement	Together with H & S plan
2.3.6	Initial Hazard Identification and Risk Assessment based on the Client/s assessment	Construction Regulations.	Together with H & S plan
2.3.7	Health and Safety Representative	OHS Act	Submit as soon as There are more than 20 employees on site
2.3.8	Detailed breakdown of Safety cost	OHS Act	During SLA

Detailed breakdown of Safety cost (Construction Regulations 2014)			
Tenderer (Company)	**Responsible Person**	**Designation**	**Date**
Project/Tender Title	**Project/Tender No.**	**Project Location / Description**	

#	Cost element	Unit Cost (R)	# of Units	Total Cost (R) (VAT incl)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10				
11				
12				
13				
14				
15				
Total Health and Safety Cost (R VAT incl)				

HEALTH AND SAFETY SPECIFICATIONS (HSS)

Annexure B

The Principal Contractor shall make the following appointments according to the initial risk assessment: (further appointments could become necessary as the project progresses). Contractors shall make the relevant appointments as per their operations. The Client reserves the right to insist on any appointment as determined by its risk assessment of the Contractor concerned.

APPOINTMENT	OHSA REFERENCE	REQUIREMENT
CEO Assignee	Section 16(2)	A competent person to assume the overall H & S responsibility - Contractor's Responsible Person
Construction Work Manager	CR 8.1	A competent person to manage construction activities and be responsible for Health and Safety related issues on site
Subordinate Construction Work Supervisors	CR 8.7	A competent person to assist with the daily supervision of construction / building work. The person(s) assist the Construction Work Supervisor
Health and Safety Representative(s)	Section 17	A competent person(s) to supervise construction activities and be responsible for Health and Safety related issues on site.
Incident Investigator	GAR 8	A competent person to investigate incidents / accidents on site, this could either be: * The 6.1 or 6.2 Person * H & S Representative * Member of the H & S Committee * H & S officer
Risk Assessment Co-ordinator	CR 9	A competent person to co-ordinate all assessments on behalf of the Principle Contractor. The same applies to Contractors.
Fall protection plan co-ordinator	CR 10	A competent person to prepare and amend the fall protection plan
First Aiders	GSR 3	A qualified person to address all on site first aid cases
Lifting machine and equipment Inspector	DMR 18	A competent person to inspect lifting machines and equipment
Lifting tackle Inspector	DMR 18	A competent person to inspect lifting tackles
Scaffolding Inspector	SANS 10085-1:2004	A competent person to inspect scaffolding before use and every time after bad weather, etc.
Scaffolding Erector	SANS 10085-1:2004	A competent person to erect scaffolding
Scaffolding Supervisor	SANS 10085-1:2004	A competent person to supervise scaffolding
Stacking Supervisor	CR 28	A competent person to supervise all stacking and

APPOINTMENT	OHSA REFERENCE	REQUIREMENT
		storage operations
Explosive powered tools Inspector / Supervisor	CR 21	A competent person to inspect and clean the tools daily and controlling all operations thereof
Temporary electrical installations Supervisor	CR 24	A competent person to control all temporary electrical installations
Fire-fighting equipment Inspector	CR 29	A competent person to inspect fire-fighting equipment

OTHER REQUIREMENTS

Annexure C

The Principal Contractor shall comply but not be limited to the following requirements: Reports on these to the addressed to the Client at progress meetings or at least monthly whichever is sooner. A report with supporting documents shall be tabled at the Contractor/s monthly Health and Safety meeting.

WHAT	WHEN	OUTPUT	ACCEPTED BY CLIENT WITH DATE
Construction-phase Health and Safety plan	Within one weeks of receipt of the Spec.	Principal Contractor to report on status of Principal Contractors' Health and Safety plans	
Health and Safety file	Open file when construction begins and maintain throughout	Have file on hand at meetings	
Awareness Training (Toolbox Talks)	At least weekly	Attendance registers	
Health and Safety Reports	Monthly	Report covering: * Incidents/Accidents and Investigations * Non-conformances by employees & contractor * Internal & External H & S audit reports	
Risk assessment	Updated and signed off at least monthly	Documented risk assessment	
Method statements (safe work procedures)	Drawn up before workers are exposed to new risks	Documented set of safe work procedures (method statements) updated and signed off	
General Inspections	Weekly and Daily	OHS Act compliance Registers: * Scaffolding * Excavations * Formwork & support work * Explosive tools * Temporary electrical Installations	
General Inspections	Monthly	* Fire-fighting equipment * Portable electrical equipment * Ladders	
General Inspections	3 - Monthly	* Lifting tackle * Oxy-acetylene cutting and welding sets * Fall prevention and arrest equipment	
General Inspections	6 - Monthly	* Lifting machines	
Workman's Compensation	Updated Weekly	Table list of Principal Contractors' workman's compensation proof of good standing	
Construction site rules & Section 37.2 Mandatory Agreement	Update Weekly	Table a report of all signed up Mandatory's	

Annexure D

The following checklist shall be used to approve the Health and Safety File

CONTRACTOR SAFETY FILE ASSESSMENT CHECKLIST

SCOPE/COVERAGE:	**Contractor Safety file Assessment**	**ERWAT CONTRACTING DEPT:**	
CONTRACTOR NAME:		**INSPECTION BY:**	
SERVICE RENDERED:		**INSPECTION DATE:**	

No.	**Are items on file and meet requirements?**	**Approved**	**Not Approved**	**N/A**
1	Scope of Work			
2	Valid Letter of Good Standing with Compensation Fund or licensed insurer			
3	Public Liability Insurance			
4	Notification Letter of Construction Work (If Applicable)			
5	Health and Safety Organogram			
6	All required legal appointments signed and on file i.e Section 16(2), SHE Reps, First Aiders, Risk Assessor, Incident Investigators, Construction Work Appointments etc			
7	All employees have valid Medical Certificate of Fitness			
8	Health and Safety Policy			
9	Health & Safety Plan,			
10	Client Health and Safety Specification			
11	Section 37(2) Mandatary Agreement			
12	Risk Assessments: Method Statements: Safe Operating Procedures (including LOTO where applicable)			
13	Incidents / Accidents Register and Investigation Reports			
14	Emergency Plan			
15	Health and Safety Induction			
16	Documented Proof of Daily Toolbox Safety Talks/ DSTI			
17	Personal Protective Equipment (PPE)			
18	Equipment Registers, Inspections Checklist and testing certificates			

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

19	List of Hazardous Chemicals and MSDS (If applicable)			
20	Environmental Management Plan			
21	Fall Protection Plan (If Applicable)			
22	Training Records and Competency Certificates			
23	Other, as per scope of work			

Annexure E

Acknowledgement of Receipt of the Health and Safety Specifications:

I,_____representing

_____Contractor

_____ _____

Have satisfied myself with the content of the construction Health and Safety Specification and shall ensure that the Contractor and its personnel comply with all obligations / requirements in respect thereof.

COMMENTS:

C3.6 ENVIRONMENTAL MANAGEMENT DURING CONSTRUCTION

C3.6.1 INTRODUCTION

A comprehensive Environmental Scoping Report was prepared as part of the environmental and social assessment of the preceded project. Included in the report is an Environmental Management Plan (EMP) and the purpose of this Particular Specification is to make the Contractor aware of his obligations in terms of the EMP during construction and to afford him the opportunity to insert rates and prices in the Schedule of Quantities to cover these obligations.

Sub-Contractors and their employees must comply with all the requirements of this specification. Absence of specific reference to any sub-contractor in any specification does not imply that the sub-contractor is not bound by this specification.

The Contractor must arrange for all his employees and those of his sub- contractors to be informed of this specification before the commencement of construction to ensure:

a.) basic understanding of the key environmental features of the work site and environments, and

b.) familiarity with the requirements of this document.

C3.6.2 MONITORING AND ASSESSMENT OF COMPLIANCE

The environmental management performance of the Contractor (including his subcontractors and staff) will be reviewed on a regular basis by the Employer's ECO. The Contractor will be deemed not to have complied with the EMP if:

a.) There is evidence of negligence or recklessness resulting in the contravention of any of the clauses, both within and outside the boundaries of the construction site;

b.) The Contractor fails to comply with corrective or other instructions within a time specified by the Engineer;

c.) The Contractor fails to respond adequately in terms of the contract, to complaints from the public.

The Contractor will be given a period of 2 weeks after the commencement date of the contract, before compliance is enforced.

Via these environmental specifications the Contractor has been made aware of what actions are required of him and/or his subcontractors. Certain do's and don'ts have been given and onus for these controls rests with the Contractor as he is the only person capable of controlling these aspects and a fine/reward system will be implemented to encourage compliance.

Compliance to the EMP will be reported by the ECO in the form of a monthly Environmental Compliance Report which will include all transgressions of the EMP and the environmental specification and rate them in order of significance. The Environmental Compliance Report will be forwarded to the Engineer, the Employer and GDACE on a monthly basis.

A percentage point will be given based on a questionnaire which is attached to the Report. Any percentage compliance above 80% will be considered to be within acceptable limits. If the Contractor has not complied with any of the clauses of the EMP, or the score in the monthly environmental audit drops to below 80% compliance, the ECO will advise the Engineer who shall order the Contractor in terms of the contract to remedy the deficiencies. Failure on the part of the Contractor to carry out such order shall be dealt with in terms of the contract.

Should compliance drop below 60% the ECO shall immediately advise the Engineer who shall have the right in terms of the contract to order in writing the suspension of the Works.

C3.6.3 COMPLIANCE WITH SANS 1200

All environmental clauses stated in the SANS 1200 "Standard Specification for Civil Engineering Construction" as amended in this document shall be adhered to by the Contractor. Where the EMP is in conflict with the Standard Specification, the EMP shall take precedence.

C3.6.4 SITE MANAGEMENT

C3.6.4.1 General

The Contractor shall draw up a plan of all parts of the construction site, showing the layout of site establishment, stockpiles, planned access and circulation routes, etc. to depict the scope of his planned operations. The plan shall be submitted to the ECO for comment and approval by the Engineer.

The Works area will be indicated on the layout plan and shall never exceed the boundaries of the site at any given location during the construction period.

Every precaution shall be taken, in accordance with this specification, to prevent pollution of air, soil, ground, and surface water as a result of construction or associated activities.

All equipment must be inspected regularly for oil or fuel leaks before it is operated. Leakages must be repaired on mobile equipment or containment trays placed underneath immobile equipment until such leakage has been repaired.

C3.6.4.2 Housekeeping

The Contractor shall ensure that his working areas are kept clean and tidy at all times. The ECO shall inspect these areas on a regular basis.

C3.6.4.3 Works area

Routes for temporary access and haul roads shall be located within the approved Works area and vehicle movement shall be confined to these roads. Movement of vehicles outside the Works area shall not be permitted without authorization from the Engineer, after consultation with the ECO.

All construction activities shall be restricted to working areas designated on the drawings and/or demarcated and approved by the Engineer. Materials, including spoil, shall only be stockpiled in the Works area.

C3.6.4.4 Fire risk and burning

Burning of vegetation including tree trunks and stumps cut during site clearing and establishment shall not be permitted.

The Contractor shall ensure that the risk of fire at any location on the site is kept to a minimum.

The Contractor shall supply fire-fighting equipment in proportion to the fire risk presented by the type of construction and other on-site activities and materials used on site. This equipment shall be kept in good operating order.

Open fires for heating and cooking shall only be permitted in protected areas designated by the ECO for this purpose.

No fires will be allowed adjacent to the boundary fence, either inside or outside the construction site.

Any welding or other sources of heating of materials must be done in a controlled environment, wherever possible and under appropriate supervision, in such a manner as to minimize the risk of veld fires and/or injury to staff.

C3.6.4.5 Storage of fuel and other materials

Fuel, lubricants, transmission, and hydraulic fluids shall only be stored in the Works area.

All fuel tanks must be installed above ground, depending on the volume of stored fuel, for easy detection of fuel leaks. All fuel tanks must be placed on a thick plastic sheet so as to prevent soil pollution, be set in a bund with earthen walls, and maintained throughout the contract.

Areas made available for fuelling or greasing of equipment and vehicles must be clearly demarcated on the layout plan. In order to prevent soil pollution, these areas must be covered with a protective material (e.g. a thick plastic sheet). No fuelling, greasing, or filling of oils may take place outside these demarcated areas.

The Contractor must provide adequate and approved facilities for the storage and recycling of used oil and contaminated hydrocarbons. Such facilities must be designed and sited with the intention of preventing pollution of the surrounding area and environment.

Cement must be stored and mixed on an impermeable substratum.

C3.6.4.6 Concrete batching plants

Concrete must be mixed only in an area demarcated for this purpose. All concrete spilled outside this area, must be promptly removed by the Contractor and taken to a permitted waste disposal site. After all concrete mixing is complete all waste concrete must be removed from the batching area and disposed of at an approved dumpsite.

The batching plant shall be enclosed by a bund wall with divisions and dedicated compartments for the various types of materials. Air filters shall be monitored and cleaned and replaced as per the supplier's guidelines.

Storm water must not be allowed to flow through the batching area.

Water laden with cement must be collected in a retention area for evaporation and not allowed to escape the batching area. This pond will be cleaned monthly.

Operators must wear suitable safety clothing.

C3.6.4.7 Safety

Equipment and stores should be locked up and not left unattended.

The Contractor must ensure that no unemployed labour seekers are permitted to gather at the site and no camp followers/shebeen operators shall be allowed to operate on or adjacent to the site.

Measures must be taken to prevent any interference that could result in flashover of power lines due to breaching of clearances or the collapse of power lines due to collisions by vehicles and equipment.

Measures must be taken during thunderstorms to protect workers and equipment from lightning strikes.

All tall structures must be properly earthed and protected against lightning strikes.

The Contractor must have a first aid box available on site and on all vehicles working on site.

The Contractor must submit a copy of the minutes of weekly health and safety meetings to the ECO.

C3.6.4.8 Blasting and drilling

A written warning of 2 days indicating the date and approximate time period of blasting activities shall be given to affected residents for the temporary removal of sensitive domestic animals such as horses, dogs, cats, birds, and cattle, before blasting and/or drilling activities commence during that period.

During blasting the stipulations of the Minerals Act, Act 50 of 1991 shall apply.

Should any warning not be given within the period specified above, the Contractor will be held liable for injuries to or deaths of the affected animals.
In order to minimize the potential impact on animals, it is proposed that soft explosives and/or noise mufflers be used.

When blasting, the Contractor shall take measures to limit flying rock. This may be achieved by matching the charge to the rock type, by using milli-second delay detonators or by using rubber blasting mats placed over the area to be blasted. Flying rock 150mm and larger which falls beyond the cleared working area shall be collected and removed together with the rock spoil.

When blasting under power lines the Contractor shall arrange for power to be temporarily switched off or have the lines moved.

C3.6.4.9 Fencing

Fencing shall be erected around sensitive natural or cultural elements to protect them from damage. No pedestrian or vehicular access shall be allowed to such fenced areas.

In places where temporary fencing is required, the Contractor shall erect such fencing and, when and where required by the Engineer, re-erect and maintain temporary fencing as necessary. Temporary fencing shall remain in position either until it is replaced by permanent fencing or until completion of the whole of the Works, unless the Contractor requires, or the Engineer directs its earlier removal. The Contractor shall erect and maintain the aforementioned temporary fencing in the locations and for the period described in the Contract.

If temporary fencing is removed temporarily for the execution of any part of the Works, it shall be reinstated as soon as practicable by the Contractor.
The clearing for permanent fencing shall be limited to the removal of trees and shrubs within 1m of the fence line. Where possible, the fence line must be aligned to retain trees or tree groups. There shall be no removal of the grass cover or topsoil within this width.

C3.6.5 CONTROL OF DAMAGE TO VEGETATION AND ANIMALS

The Contractor shall ensure that all works are undertaken in a manner which minimizes the impact on vegetation and animals inside or outside of the Works area.

C3.6.5.1 Vegetation

As much of the existing vegetation as possible shall be retained. The removal of existing vegetation shall only occur at the sites designated for construction activities. Only woody vegetation may be cleared. During clearing of woody vegetation no basal cover or grass and topsoil shall be removed and damage to this layer shall be minimized as far as possible.

Bush and grass veld must only be cleared to provide essential access for construction purposes.

No indigenous shrubs and/or trees shall be cut down by the Contractor. Removal, damage or disturbance of any vegetation outside the Works area is not permitted. Special care shall be taken not to disturb or destroy riverine vegetation.

Trees which have been selected for preservation by the ECO within or adjacent to the Works areas shall be fenced around their drip line. The fence shall be clearly marked with danger tape. No open fires shall be allowed within this fenced area, nor shall vehicles be parked underneath these trees. The area shall also not be used for materials storage or as allocation for temporary buildings. If such trees are located within the 15m working width of the pipeline, the pipeline shall be aligned to avoid these trees wherever possible.

Gathering of firewood shall not be permitted.

The Contractor shall take care that seeds are collected during the removal of alien vegetation in order to counter the spread of this vegetation type. Failure to do so may result in prosecution in terms of the Conservation of Agricultural Resources Act (Act 43 of 1983). A fine not exceeding R5000 and/or 2 years imprisonment can be imposed.

No vehicular access will be allowed on the grassy parts of the construction site.

C3.6.5.2 Disturbance of animals

Under no circumstances shall any animals be handled, removed, killed or interfered with by the Contractor, his employees, his sub-contractors or his sub-contractors' employees. Snakes and other reptiles that may be encountered on the construction site must not be killed unless the animal endangers the life of an employee. Disturbances to nesting sites of birds must be minimized. Anthills and/or termite nests that occur in the Works area must not be disturbed unless it is unavoidable for construction purposes.

The Contractor and his employees shall not bring any domestic animals onto the site.

The Contractor shall ensure that the work site is kept clean and tidy and free from rubbish which would attract animal pest species. There shall be no feeding of native animals.

The Contractor shall ensure that domestic and native animals are safe from injury that may arise from unprotected Works.

The Contractor shall advise his workers and subcontractors of the penalties associated with the needless destruction of wildlife, as set out in the Animals Protection Act (Act 71 of 1962) sec. 2 (fine R2 000 and/or 12 months imprisonment).

C3.6.6 CONTROL OF DAMAGE TO SOIL AND WATER

C3.6.6.1 Stripping of topsoil

Topsoil shall be deemed to be the top 300mm layer of soil. This layer contains organic material, nutrients and plant and grass seed. For this reason it is an extremely valuable resource for the rehabilitation and re-vegetation of disturbed areas.

Topsoil shall be stripped from all areas that are to be utilized during the construction period and where permanent structures and access is required. These areas will include the area comprising the permanent works, pipeline trenches, stockpiles, temporary and permanent access roads, construction camps, lay down areas, and any other area as indicated on the Works area drawings. Topsoil shall be stripped after clearing of woody vegetation and before excavation or construction commences.

Soil shall be stripped to a minimum depth of 150mm and maximum depth of 300mm or to the depth of bedrock where soil is shallower than 300mm. Herbaceous vegetation, overlying grass and other fine organic matter shall not be removed from the stripped soil.

No topsoil which has been stripped shall be buried or in any other way be rendered unsuitable for further use by mixing with spoil or by compaction by machinery.

Topsoil shall be stripped when it is in a dry condition in order to prevent compaction.

Stripping of topsoil shall be undertaken in such a way as to minimize erosion by wind or runoff.

C3.6.6.2 Stockpiling of topsoil

The Contractor shall ensure that subsoil and topsoil are not mixed during stripping, excavation, reinstatement, and rehabilitation. If mixed with clay sub-soil the usefulness of the topsoil for rehabilitation of the site will be lost. Temporary soil stockpiles shall not be higher than 2,5m, and the slopes of soil stockpiles shall not be steeper than 1 vertical to 1,5 horizontal.

Areas from which topsoil is to be removed shall be cleared of any foreign material which may come to form part of the topsoil during removal including bricks, rubble, any waste material, litter any other material which could reduce the quality of the topsoil.

Soil must not be stockpiled on drainage lines or near watercourses.

No vehicles shall be allowed access onto the stockpiles after they have been placed. Topsoil stockpiles shall be clearly demarcated in order to prevent vehicle access and for later identification when required.

After topsoil stockpiling has been completed, the Contractor shall apply soil conservation measures to the stockpiles where and as directed by the Engineer / Environmental Officer. This may include the use of erosion control fabric and/or grass seeding.

C3.6.6.3 Placement of topsoil

Topsoil shall be placed to a minimum depth of 150mm over all areas where it has been stripped, after construction in those areas has ceased. Topsoil placement shall follow as soon as construction in an area has ceased.

All areas onto which topsoil is to be spread shall be graded to the approximate original landform with maximum slopes of 1:2,5 and shall be ripped prior to topsoil placement. The entire area to be covered with topsoil shall be ripped parallel to the contours to a minimum depth of 300mm.

Topsoil shall be placed in the same soil zone from which it had been stripped. However, if there is insufficient topsoil available from a particular soil zone to produce the minimum specified depth, topsoil may be brought from other soil zones on approval by the Engineer after consultation with the ECO.

minimum specified depth, the Contractor shall obtain suitable substitute material from other sources at no cost to the employer. The suitability of the substitute material shall be determined by means of a soil analysis which is acceptable to the Engineer.

No vehicles shall be allowed access onto or through topsoil after it has been placed.

After topsoil placement is complete, cleared and stockpiled vegetative matter shall be spread randomly by hand over the area covered with topsoil.

C3.6.6.4 Klip river and Rietspruit

The Klip River is situated approximately 250 m to the west of the construction site at its closest point, and the Rietspruit approximately 300 m to the east.

Site staff shall not be permitted to use the Klip River or the Rietspruit for the purpose of bathing, washing of clothing or vehicles nor disposal of any type of waste.

The Contractor shall not in any way modify nor damage the banks or bed of the Klip River or the Rietspruit and its drainage lines, unless required as part of the construction project specification and in consultation with the Project Manager and the ECO. Abstraction of water from the Klip River is allowed provided that no

damage to the banks of the Klip River shall occur. Should damage occur the Contractor will be held liable for any reparation and/or rehabilitation to the banks of the Klip River and for prosecution in terms of the National Water Act (Act No. 36 of 1998).

All fuel, chemical, oil, etc spills must be confined to areas where the drainage of water can be controlled. Appropriate structures and methods to confine spillages such as the construction of berm shall be provided.

C3.6.7 Control of pollution

As a minimum requirement all waste emissions (hazardous, airborne, liquid and solid) from the site shall be kept within the limits of standards set in terms of relevant national and local pollution legislation and regulations.

C3.6.7.1 General

No waste of a solid, liquid or gaseous nature shall be emitted from the site without approval by the Engineer.

Precautionary measures must be taken to prevent any form of pollution.

Accidental pollution incidents shall be reported to the Engineer and the ECO immediately after they occur and shall be cleaned-up by the Contractor or a nominated clean-up organization at the expense of the Contractor.

C3.6.7.2 Soil

Vehicle and plant maintenance shall be confined to the areas demarcated for this purpose. Should any amount of fuel, oil transmission or hydraulic fluids be spilled onto the soils the Engineer and the ECO shall be informed immediately. If ordered by the Engineer, tests must be conducted to determine the extent of soil contamination. The polluted soil shall be rehabilitated or remediated to the satisfaction of the Engineer, after consultation with the ECO. Proof of disposal of contaminated soil must be submitted by the Contractor to GDACE within 14 days of the disposal thereof.

C3.6.7.3 Water

Water containing waste shall be prevented from entering the Klip River or the Rietspruit either by seepage or natural flow. Oil absorbent fibres must be used to contain oil spilled in water.

Cost effective measures must be taken to minimize the flow of surface water to trench excavations.

On-site storm water management over the construction site shall be to the satisfaction of the Engineer.

C3.6.7.4 Air

All reasonable measures should be taken to minimize air emissions in the form of smoke, dust, and gases.
All machinery and vehicles used for the Works shall be in good working order. Any vehicle or piece of machinery that visibly emits excess pollutant shall be removed from site.

Waste must not be allowed to stand on site to decay, resulting in malodours. No fires shall be allowed if smoke from such fires will cause a nuisance to neighbouring residents.

C3.6.7.5 Sewage

Any spillage of sewage caused by the Contractor or any of his employees or subcontractors during the construction activities shall be cleaned up at the expense of the Contractor.

C3.6.8 MANAGEMENT OF WASTE

In practice all wastes arising from construction activities are to be handled, transported and disposed of in accordance with the relevant regulations. All efforts should be made to minimize, reclaim or recycle waste, and failing that, dispose of it in a manner licensed by the government for that purpose.

C3.6.8.1 Sanitation

The Contractor shall provide adequate sanitation facilities in accordance with Clause PSA 1.2 hereof. The use of the surrounding veld for toilet purposes shall not be permitted under any circumstance.

C3.6.8.2 Wastewater

Definition: Wastewater is water that is contaminated by humans through their actions.

All run-off from fuel depots, workshops, truck washing areas, and wash water from concreting vehicles and other equipment shall be collected and directed through pollution traps to the operational sewers. If connection to the sewers is not possible, the wastewater shall be collected in settlement ponds, which shall be suitably lined at the Contractor's expense.

Wastewater may not be disposed of directly or indirectly into the Klip River or the Rietspruit. The Contractor shall provide suitable retention and filtration structures (which shall be properly maintained) for the collection of wastewater.

The Contractor shall provide washing and changing facilities. All run-offs from these washing and/or changing facilities shall be contained in the retention structures to the satisfaction of the Engineer.

C3.6.8.3 Solid waste

Definition: "Solid Waste" refers to all construction waste (such as rubble, cement bags, waste cement, timber, cans, other containers, wires and nails), household and office waste.

Solid waste shall be collected and stored in demarcated, fenced areas in skips and/or bins. The fenced areas or containers should be designed to prevent solid waste from being blown out by wind and should be strategically and conspicuously placed throughout the site.

Wherever possible solid waste that can be recovered shall be recycled.

Solid waste shall be disposed of at a registered solid waste disposal site. The prices submitted by the Contractor shall include all transportation and disposal costs of waste. Solid waste shall not be buried nor burned on site.

The entire works area and all construction sites must be swept of all pieces of wire, metal, wood or other material foreign to the natural environment.

C3.6.8.4 Hazardous wastes

Definition: Hazardous wastes are those which are proven to be toxic, corrosive, explosive, flammable, carcinogenic, radioactive, poisonous or as determined by the Hazardous Substance Act as amended.

Discharges of hazardous chemicals (such as paint, turpentine, oil and cement), as declared under the Hazardous Substances Act as amended, on the site or to the storm water system are prohibited.

Potentially hazardous raw and waste materials shall be handled and stored on-site in containers with tight lids that must be sealed and must be disposed of at an appropriately permitted hazardous waste disposal site. Such containers must not be used for purposes other than those originally designed for.

The following hazardous waste products shall be disposed of at a registered hazardous waste disposal site:

a) cement;
b) diesel, petroleum, oil and lubricants;
c) explosives;
d) drilling fluids;
e) pesticides;
f) paints and turpentine;
g) concrete additives; and
h) any other material which is listed in terms of the Hazardous Substances Act.

The Contractor must maintain a hazardous materials register.

C3.6.9 MANAGEMENT OF STORMWATER AND SOIL EROSION

The aim is to minimize soil loss from the site due both to wind and water.

C3.6.9.1 Storm water

At all stages of the contract, storm water control measures shall be applied to keep soil on-site by minimizing

a) Erosion or leaching of water from temporary stockpiles of topsoil and permanent spoil dumps
b) Erosion from construction roads, excavations and borrow pits, where applicable
c) Silt-laden run-off from all areas stripped of vegetation, including excavation surfaces and stockpiles of spoil and topsoil (the correct placement of rocks together with straw bales can be used to prevent silt-laden run-off); and
d) Contaminated run-off from storage areas;

Thereby preventing it from entering waterways or the storm water drainage system.

Natural storm water run-off that is not polluted by site operations shall be diverted around spoil dumps and topsoil stockpiles. Effective measures shall be taken to minimize the flow of storm water to excavations.

Where uncontaminated storm water has accumulated in excavations and needs to be pumped out, it must be disposed of in such a way that erosion does not occur along the course of its passage. Contaminated storm water shall not be disposed of into the waterways, unless it has been treated to the satisfaction of the Engineer, after consultation with the ECO.

C3.6.9.2 Control of erosion

At all stages of the contract, erosion of bare soil, other excavation surfaces and stockpiles of topsoil and spoil shall be prevented by the application of erosion control measures.

Should erosion occur due to negligence on the part of the Contractor to apply adequate measures, the Contractor will be responsible for reinstatement of the eroded area to its former state at his own expense. Any surface water pollution occurring, as a result of this negligence, shall be cleaned up by the Contractor or a nominated clean-up organization at the expense of the Contractor.
Cross and side storm water drainage measures shall be constructed on access and haul roads to the site and on roads within the site.

The Contractor shall ensure that run-off from access and haul roads, and that diverted into cross and side drains, does not cause erosion

C3.6.10 CONTROL OF DISTURBANCE TO NEIGHBOURS AND/OR AFFECTED RESIDENTS

All issues and items agreed to in the negotiations and discussions between the Owner and affected residents must be implemented.

C3.6.10.1 Scenic quality

The Contractor shall position all temporary structures as well as temporary plant on site in locations and at elevations which limit visual intrusion on neighbours. The type and colour of roofing and cladding materials shall be selected to reduce reflection.

The Contractor shall not establish or undertake any activities which, in the opinion of the Engineer, are likely to adversely affect the scenic quality of the area. The Engineer may direct the Contractor to refrain from such activities or to take ameliorative actions to reduce the adverse effect of such activities on the scenic quality of the environment.

No painting or marking of natural features shall be done. Marking for surveying and other purposes shall only be done with pegs and beacons.

All cut and fill forms shall be rounded at the edges to blend them with the surrounding landforms.

All packed rock and exposed rock cuttings shall be treated in order to blend their colour with the colours of the natural weathered rocks of the adjacent environment.

The colours of all permanent structures shall be chosen so as to blend in with the dominant colours of the surrounding landscape. Painted surfaces shall be painted with non-reflective (matt) colours.

C3.6.10.2 Noise

All noise levels must be controlled at the source. All employees must be given the necessary ear protection gear. Neighbouring residents must be informed of excessive noise factors.

Noise emanating from construction activities must not be "disturbing noise", that is, the sound level from the site measured at the nearest dwelling must not exceed the ambient noise level by 7dBA or more.

Appropriate directional and intensity settings should be maintained on hooters and sirens, if applicable.

Silencer units on plant and vehicles shall be maintained in good working order. Any vehicle/machine emitting excess noise shall immediately be removed from site or effectively repaired.

Where required by the ECO after consultation with the Engineer, the Contractor shall provide noise reduction measures in the form of cladding and earth berm between sources of on-site noise and neighbours and/or affected property owners.

A speed restriction of 40 km/h shall be imposed on all construction vehicles in order to limit additional noise generated by these vehicles. This restriction shall apply to the site and any road within 2 kilometres of the site.

No loud music shall be allowed on site and in construction camps.

C3.6.10.3 Dust

The Contractor shall ensure that a minimum of dust is generated by construction and related activities. Roads and working areas should be maintained regularly and this may include the sprinkling of water. Water for this purpose shall be used sparingly to not generate run-off and resulting soil erosion.

The Contractor shall control dust from spoil dumps as specified above.

Soil and aggregate loads in transit must be kept covered, to prevent wind borne pollution (dust).

Stockpiles of soil must be kept covered or have a suitable dust palliative applied, such as water or commercial dust suppressants, to prevent windborne pollution.

C3.6.10.4 Social interaction and disruption

The Contractor shall maintain normal working hours (i.e. from 07:00 until 17:00) from Mondays to Fridays for the duration of the construction period. The Contractor must inform all adjacent landowners of any after-hour construction activities and any other activity that could cause a nuisance e.g. the application of chemicals to the work surface.

The Contractor's activities and movement of staff shall be restricted to designated construction areas only. The Contractor and site staff may not interact directly with adjacent landowners but only through the Engineer, who will contact property owners to obtain permission.

The Contractor's staff shall wear special identity cards (with the employees' photograph displayed on the card), which shall make identification possible, at all times. Any temporary staff employed by the Contractor or any sub- contractor appointed by the Contractor shall also comply with this clause.

Rapid migration of job seekers could lead to squatting and social conflict with resident communities and increase in social pathologies if not properly addressed. The Contractor must ensure that signs indicating the availability of jobs are installed.

Criteria for selection and appointment, by the Contractor, of construction labour must be established to allow for preferential employment of local communities.

C3.6.10.5 Disruption of services and access

Care must be taken by the Contractor to avoid damaging major and minor pipelines and other services. The relevant authorities must be notified of any interruptions of services, especially the Mid Vaal Local Municipality, the National Roads Agency, Spoornet, TELKOM and ESKOM.

Disruption of access for local residents during construction, and haulage or any other construction activity shall only take place with the prior consent of the Engineer.

The Contractor shall liaise with the Engineer on a regular basis with regard to specific activities that could cause inconvenience to property owners, especially increased vehicular traffic through residential areas adjacent to the site. The Contractor shall prior to commencement inform property owners of his planned activities within a reasonable period of time.

The movement of construction vehicles through the affected areas shall be restricted to off-peak hours to minimize adverse impacts on private vehicular traffic. Temporary access roads must not be opened until required and must be restored to its former state as soon as the road is no longer needed.

C3.6.10.6 Traffic control

The Contractor shall ensure that all construction traffic including that of subcontractors, vendors, suppliers of materials and services are notified that a special speed limit of 40 kph shall apply along any road within the adjacent Klipwater Township; and special attention shall be given to road signs. Vehicles not complying with this ruling shall on the instruction of the Engineer, be denied access to the Site.

C3.6.11 Archaeology and cultural sites

All finds of human remains must be reported to the nearest police station.

Human remains from the graves of victims of conflict, or any burial ground or part thereof which contains such graves and any other graves that are deemed to be of cultural significance may not be destroyed, damaged, altered, exhumed or removed from their original positions without a permit from the South African Heritage and Resource Agency (SAHRA).

Work in areas where artefacts are found must cease immediately.

Under no circumstances must the Contractor, his/her employees, his/her sub-contractors or his/her sub-contractors' employees remove, destroy or interfere with archaeological artefacts. Any person who causes intentional damage to archaeological or historical sites and/or artefacts could be penalised or legally prosecuted in terms of the National Heritage Resources Act, 25 of 1999.

A fence at least 2m outside the extremities of the site must be erected to protect archaeological sites.

All known and identified archaeological and historical sites must be left untouched.

Work in the area can only be resumed once the site has been completely investigated. The Engineer will inform the Contractor when work can resume.

C3.6.12 REHABILITATION

It is important that rehabilitation will commence as soon as feasible and to run in parallel with the construction and not to be left until completion of the works. This will increase the chances of successful rehabilitation as it can be monitored throughout the construction period.

The construction site shall be cleaned and rehabilitated as close as is reasonably possible to its original state.

All drainage deficiencies must be corrected.

Cut and fill areas must be restored and re-shaped.

Areas compacted by vehicles during construction must be scarified to allow penetration of plant roots and the re-growth of natural vegetation.

Rehabilitation of all the disturbed and compacted areas shall mean that these areas are ripped and covered with topsoil.

- Ripped shall mean - ploughed with a ripper to a depth of not less than 300mm in two directions at right angles.
- Top soiled shall mean - the spreading of a minimum of 150mm of stockpiled topsoil either before or after ripping over the surface to be rehabilitated.

The areas immediately adjacent to the Works which are not designated for paving shall be grassed in accordance with the relevant engineering specification.

All alien vegetation removed during construction shall not be replaced.

The rehabilitated areas will be weeded by the nominated rehabilitation contractor for a period of 1 year.

C3.6.13 RESPONSE TO PUBLIC COMPLAINTS

The Contractor shall assist the Engineer with responding to queries and complaints from the public regarding construction activities by:

a.) Documenting the details of such communications and submitting the information to the Engineer for inclusion in the complaints register;
b.) bringing any such matters to the attention of the Engineer immediately as they

arise;

c.) taking any remedial action as per the Engineer; and d.) discuss such matters at the site meetings.

The Contractor shall assist the Engineer and consult with affected parties for the purpose of explaining the construction process and answering questions raised by affected parties at reasonable times.

Should the owner of any property, contact the Contractor during the construction period regarding specific requests, the Contractor shall include all pertinent details in his report (Section 2.3 hereof).

C3.6.14 CLEARANCE OF SITE ON COMPLETION

On completion of the Works, the Contractor shall clear away and remove from the site all construction plant, surplus materials, foundations, plumbing and other fixtures, rubbish and temporary works of every kind. Areas thus cleared shall be graded and scarified to restore the ground to its original profile as near as practicable before topsoil placement.

C3.6.15 COMPLIANCE WITH ENVIRONMENTAL MANAGEMENT SPECIFICATIONS

a.) All persons employed by the Contractor or his subcontractors shall abide by the requirements of these Environmental Management Specifications.

b.) Any employees of the Contractor or his subcontractors found to be in breach of any of the Environmental Management Specifications may be ordered by the Engineer to leave the site forthwith. The order may be given orally or in writing. Confirmation of an oral order will be given as soon as practicable but lack of confirmation in writing shall not be a cause for the offender to remain on site. No extension of time will be granted for any delay or impediment to the Contractor brought about by a person ordered to leave the site.

c.) Supervisory staff of the Contractor or his subcontractors shall not direct any person to undertake any activities which would place such person in contravention of the Environmental Management Specifications.

d.) Via these specifications the Contractor has been made aware of what actions are required of him and/or his subcontractors. Certain do's and don'ts have been given and onus for compliance rests with the Contractor as he is the only person capable of controlling these aspects. A fine/reward system will be implemented to encourage compliance. For every week that the Contractor successfully complies with the Environmental Management Plan and Specifications a bonus sum of R500 will be generated. However, for each and every time that the Environmental Management Plan and Specification is not met, a fine of R500 will be imposed.

C3.6.16 MEASUREMENT AND PAYMENT

Unit:

Under Schedule No. 1 in Bill: Environmental Management ..... Sum.

The lump sum tendered shall include full compensation for initiating and maintaining the environmental awareness campaign as required in the Environmental Management Plan and Specifications.

C3.7 QUALITY ASSURANCE REQUIREMENTS

DOCUMENTS TO BE SUPPLIED BY CONTRACTOR

The contractor appointed to carry out the work shall produce a comprehensive set of detailed design drawings suitable for issue for construction as well as provide detailed shop drawings, prior to manufacture of equipment.

The contractor shall also be responsible for the submission of detailed As-Built drawings, commissioning reports and operating and maintenance manuals in the form of **electronic and hard copies** on completion.

- **ADDITIONAL DOCUMENTS REQUIRED**

a. INSTALLATION REFERENCES

The contractor is required to submit equipment references (Brochure) with the tender document for evaluation during the adjudication/evaluation process.

b. DRAWINGS

The contractor is required to submit a General Layout of the installation with the tender for evaluation during the adjudication/evaluation process. Drawings shall be Hard Copy of A3 size.

c. TECHNICAL WARRANTEE

All equipment supplied shall have a guarantee/warrantee period of 12 months from date of completion. Proof of this guarantee shall be submitted with after successful commissioning and commencing on the same day as the final site acceptance test certificate.

d. CONFIRMATION ON SPARES AVAILABILITY

Bidder should supply ERWAT with a confirmation from their supplier that spares of this particular equipment will still be available in 10 years' time.

e. CIDB RATING

The Contract CIDB Rating required for this Contract is CIDB GRADING **8 ME or higher**. Bidders shall submit proof of current registration or application to register for this Grading or higher.
Failure to adhere to this requirement will lead to disqualification.

f. CONTRACT

The contract to be used for this tender will be the ERWAT standard SLA (Service Level Agreement) which will be the binding contract between ERWAT and the successful bidder.

g. PAYMENTS

All payments will be discussed and agreed upon on the SLA.

h. RETAINED AMOUNT

5 per cent of the contract amount will be retained by ERWAT for the entire warrantee period and will only be paid to the contractor after the warrantee has lapsed.

i. TIME FOR COMPLETION

The time for completion of this contract, from date of signing SLAs up to and inclusive of commissioning and "first delivery" shall be **three year contract (36 months)**. Note that the defects liability period of 12 months commences at first delivery. Final delivery shall take place at the expiry of the defects liability period. A detailed construction program shall also be submitted within 7 (seven) days after appointment prior signing SLA. This program shall be finalized in liaison with and approved by the Project technician.

j. SECURITY OF MATERIALS AND EQUIPMENT

It is the responsibility of the contractor as no uninstalled equipment shall be left on site. The Contractor shall replace any materials damaged or stolen from site prior to first handover with no cost to ERWAT. Therefore, bidders are responsible for insurance on all items until official handover to ERWAT.

k. QUALITY OF MATERIALS

All materials shall comply with the relevant specifications. All materials shall be unconditionally guaranteed for a period of 12 months from the date of practical completion, which is first hand over. Where supplier's guarantees are of a shorter duration than 12 months, the Contractor shall unreservedly agree to the extension and cession of all warranties and guarantees to ERWAT.

l. FINISHING AND TIDYING

In view of the concentration of construction and other activities likely to be experienced during the Contract period, progressive and systematic finishing and tidying will form an essential part of this Contract. On no account will soil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily impede the activities of others. In the event of this occurring the ERWAT will have the right to withhold payment for as long as may be necessary in respect of the relevant Works in the area(s) concerned without thereby prejudicing the rights of others to institute claims against the Contractor on the ground of unnecessary obstruction.

Finishing and tidying shall therefore not be left to the end of the Contract, but shall be a continuous operation. All removed items/rubble must be removed from ERWAT site to the nearest ERWAT site or approved landfill site/transfer station as indicated by the ERWAT representative.

m. CERTIFICATE OF COMPLIANCE AND SAMPLES

The tenderer shall indicate, section-by-section, whether or not his tender complies in every respect with this specification.

If alternative quotations are submitted, all divergences from this specification shall be clearly stated and included in the supporting document file.

Technical literature consisting of brochures, technical description and configurations shall be submitted for comparative evaluation with the tender. Failure to comply with the above will invalidate the tender. Samples of the various equipment shall be forwarded on request from the Engineer.

n. TRAINING OF OPERATING AND MAINTENANCE STAFF

1. The Contractor shall undertake to train the Employer's operating and maintenance staff to be fully competent in the operation, maintenance, fault finding, replacement and repair of the equipment.

2. Before or on completion of the installation, when the system is in running order, the Contractor shall instruct operators in the operation of the system until they are fully conversant with the equipment and the handling thereof.

3. The Contractor shall take full responsibility for the safety of personnel during training and for the quality of work produced by such personnel under his supervision.

4. Tenderers have to include in the tender price for a training course for at least 5 persons from maintenance staff on the maintenance, fault finding, replacement and repair of the equipment.

5. Tenderers have to include in the tender price for a training course for at least 5 persons from operation staff on the installed system, process and the handling thereof.

6. Supplier must provide a training details on maintenance and operation training as required above.

7. The operations training course have to contain at least the functions, facilities and operation of the system on the different levels and shall include:

    1. Description of the system.
    2. Operating instructions and procedures for all levels of control personnel.

8. The maintenance-training course has to contain all normal maintenance procedures and repairs to be done for everyday problems with the system.

9. All material included in the courses, shall be included in the operating and maintenance manuals.

10. The contractor shall supply the Engineer with a proposed training course, one month prior to the commissioning of the system.

o. TESTS AND COMMISSIONING

1. General

a. The Contractor shall draw up procedures for and execute the following tests and inspections:

- Factory acceptance tests.
- Site inspections.
- Site acceptance tests.
- Site commission and handover.

b. The Employer and Engineer will have the right to attend any or all tests and inspections.

c. The Contractor must supply all the necessary test equipment to execute the tests.

d. All completed test and inspection reports must be submitted to the Engineer before acceptance of the system.

e. The Contractor must execute all tests and submit completed test reports to the Engineer. The Engineer shall have the right to request the Contractor to perform all or some tests in the presence of the Engineer and the Employer.

f. In the event of failure of the system to pass any of the tests, a re-test will be required within 14 days of the original test. The cost associated with all re-tests will be for the account of the Contractor.

1.1 Factory acceptance tests

- All equipment must undergo factory testing in accordance with relevant SANS standard before being delivered to site.
- The factory tests must ensure that only specified equipment is supplied.
- The factory test procedures must include at least the following:

  - Item/equipment description and serial number.
  - Test equipment description and serial number.
  - Logical explanation of actions and/or measurements to be taken in order to determine the compliance with the specifications.

a. Test reports containing the following:

- Specified values/requirements.
- Measures/observed values/requirements.
- Remarks.

- Name and capacity of person that performed the test.
- Date of tests.
- Space for acceptance of test report by Engineer.

b. The test procedures must be submitted to the Engineer for approval at least two weeks before the scheduled test date.

1.2 Site inspections, site acceptance tests, commissioning, handover and Certificate of Compliance

c. Contractor must be registered to conduct testing of earth mat and bonding, and issuing of Certificate of Compliance thereof.

d. On completion and handover of the work the Layout schematic drawings are required from the contractor; These shall be submitted, drawings are to show the extent of the system layout designed specifically for the building(s) or structures included in the contract drawings along with installation details of the equipment and the operating/test manual.

e. Non-corrosive engraved plate detailing the date of COC, supplier details, serial number and all technical specifications of the system installed, this is to be attached to each structure.

- Inspections must be done on all equipment and material delivered to site.
- The site inspections must ensure that all equipment and material being delivered complies with the requirements with regard to size, colour, finish, model, etc.
- The site inspection procedures must include at least the following:

i. Item/material/equipment description and lot/serial number.
ii. Logical explanation of characteristics to be checked.
iii. Inspection reports containing the following:

- Characteristics required.
- Characteristics observed.
- Remarks.
- Name and capacity of person that performed the inspection.
- Date of inspection.
- Space for acceptance of inspection report by the Engineer.

- COC to be issued in accordance with relevant SANS standard at time of hand over.
- Visual inspection, bonding test, ground earthing resistance test and all other necessary tests to be done.
- ERWAT will instruct the Contractor when Installation and Commissioning can commence.
- The certificate shall be co-signed by either the Contractor or a qualified ERWAT Technician.

- An Electrical Certificate of Compliance has to be issued for the installation work done, the contractor must be in the capacity of performing the tests and certifying compliancy.
- The commissioning and the testing of the equipment will be done in the presence of the designated ERWAT representative

p. PENALTIES AND CALCULATION CRITERIA

Penalties will take effect as soon as delivery period agreed upon has lapsed. The date of official order will be the date when both parties have agreed on terms and signed the service level agreement. The penalties are further discussed on the SLA.

C3.1.5.2 QUALITY CONTROL PLAN

Quality control plans are required for every stage of the project implementation process. The stages are divided as follows:

Pre-manufacturing Quality control

Material Quality control

Manufacturing or constructing Quality control

Installation Quality control

Commissioning Quality control

The Quality control plan will be based on the project plan progress and quality evaluation intervention will be implemented at predetermined milestones. At these milestones hold points will allow for Quality control inspection to take place before any further activities are undertaken. The inspection details and documentation will be determined the product service or activity. In the case of a manufacturing process the manufactured will be required to submit a QCP and related documentation to the Engineer to be approved with regards to the specific product. In the case of construction or installation work the supplier will be required to submit a detailed method statement that will be the bases of the QCP. The same will apply to the commissioning process. The following document is an example of the proposed format for a QCP. The basic hold points will be for:

Dimensional inspection-D

Visual inspection - V

Functional tests - F

Factory acceptance test - FAT

Site acceptance test - SAT

Other hold points may be added if required and alternative QCP may be used based on the approval from the engineer.

GENERAL ITEMS

- Risk assessment requirements must be complied with in terms of the construction regulations (2014).
- A Safety File will be required upon receipt of an award letter
- Site induction training has to be completed before any work can be undertaken.
- All the relevant work permits and authorization has to be obtained before any work can be undertaken.
- All work done and equipment supplied has to be in accordance with the relevant and current code and applicable statutory requirements listed.
- The relevant requirement with regards to the Occupational Health and safety act has to be Complied with, with particular reference to the safety file in accordance with the construction regulation and items covered by this document taking into consideration that that the most current regulation will always take precedence.
- No modifications to equipment may be undertaken without written approval from the designated ERWAT representative.
- All the required tools, consumables, testing facilities, etc. required to perform the work as per the Contract shall be provided by the Contractor.
- ERWAT reserves the right to hold Contractor responsible for any equipment that will be damaged due to Contractor's negligence or poor workmanship.
- All consumables will be included where required.
- Penalties will apply as detailed in relevant section