



**CIDB 7 EP**

CIDB REFERENCE NUMBER: \_\_\_\_\_

**PROJECT NO: ERW2302/03**

**DESCRIPTION: APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**

**DEPARTMENT: INFRASTRUCTURE PLANNING AND PROJECTS**

**COMPULSORY VIRTUAL BRIEFING SESSION : Tuesday, 28th March 2023 at 09h00**

**( [https://erwatza.zoom.us/meeting/register/tJlpfmrjovHt2AI\\_Ywcp39vN5bZAW83ouT](https://erwatza.zoom.us/meeting/register/tJlpfmrjovHt2AI_Ywcp39vN5bZAW83ouT) )**

**CLOSING DATE: Monday, 17th April 2023 @ 12h00**

**NAME OF BIDDER:**

\_\_\_\_\_  
(BIDDING ENTITY) FULL NAME i.e. (CC, (PTY) LTD, LTD, JV, SOLE PROPRIETOR etc.)

**TEL NUMBER** : \_\_\_\_\_

**FAX NUMBER** : \_\_\_\_\_

**NATIONAL TREASURY CSD NUMBER** : MAAA \_\_\_\_\_

**BIDDERS OFFER:** *Please note 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.*

**ERWAT STAMP**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL  
GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED'  
BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**

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*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*



**BID ERW2302/03: APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**

**T1.1 REQUEST FOR PROPOSAL NOTICE AND INVITATION**

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

Project No.	Project Description	CIDB Grading	Contact	Compulsory Briefing Session Date	Closing Date	Tender Cost
ERW2302/03	APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS	7 EP	Mr. L Maneli 011 929 7000	Tuesday, 28th March 2023 at 09h00 Kindly register to attend the zoom meeting	Monday, 17th April 2023 @ 12h00	R250

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 clarification meeting with the representative of the employer will be held through a virtual briefing session - [https://erwatza.zoom.us/join/9tJpfmtrjovHt2AI\\_Ywcp39vN5bZAW83ouT](https://erwatza.zoom.us/join/9tJpfmtrjovHt2AI_Ywcp39vN5bZAW83ouT) Registration is required

Completed Tenders in ink and clearly marked "**Contract No.: ERW2302/03 APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**" must be placed in the Tender Box, ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein/Bronkhorstspuit), Kempton Park, not later than **Monday, 17th April 2023 @ 12h00** 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: [phumzile.mdlalose@erwat.co.za](mailto:phumzile.mdlalose@erwat.co.za) / [Brenda.matlala@erwat.co.za](mailto:Brenda.matlala@erwat.co.za), All Technical Enquiries shall be addressed to Lehlohonolo Maneli at [lehlohonolo.maneli@erwat.co.za](mailto:lehlohonolo.maneli@erwat.co.za)/ 011 929 7000.**

Bids will be evaluated in terms of ERWAT' Supply Chain Management Policy, the MFMA ACT 56 of 2003 SCM Regulations, the Preferential Procurement Policy Framework Act 2000 and its Regulations, 2022, the General Conditions of Contract for construction (GCC) 2015 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).

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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](http://www.erwat.co.za/procurement)) and the National Treasury's e-tender portal ([www.etenders.gov.za](http://www.etenders.gov.za)).

17 March 2023 (date of ad on website and in media)

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL  
GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS  
FOR A PERIOD OF THIRTY SIX (36 NO.) 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](http://www.cidb.org.za) which is reproduced without amendment or alteration for the convenience of tenderers 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
<b>F1.1</b>	<b>The Employer is:</b>  Ekurhuleni Water Care Company (ERWAT) Hartebeestfontein Office Park R25 (Bapsfontein/Bronkhorstspuit Road) Kempton Park
<b>F.1.2</b>	<b>The Tender document's contents is as follows:</b>  <b><u>THE TENDER</u></b>  <b>Part T1: Tender Procedures (Pink)</b> T1.1 Tender notice and invitation to Tender T1.2 Tender Data

  
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Witness 2

  
Employer

  
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Witness 2

	<p><b>Part T2: Returnable Documents (Pink)</b></p> <p>T2.1 List of returnable documents</p> <p>T2.2 Returnable schedules</p> <p><b><u>THE CONTRACT</u></b></p> <p><b>Part C1: Agreements and Contract Data (Yellow)</b></p> <p>C1.1 Form of Offer and Acceptance</p> <p>C1.2 Contract Data</p> <p>C1.3 Occupational Health and Safety</p> <p>C1.4 Corporate Governance Breach Clause</p> <p><b>Part C2: Pricing Data (Yellow)</b></p> <p>C2.1 Pricing Instructions</p> <p>C2.2 Bill of Quantities</p> <p><b>Part C3: Scope of Work (Blue)</b></p> <p>C3.1 Description of Works</p> <p>C3.2 Engineering</p> <p>C3.3 Construction</p> <p>C3.4 Management of Works</p> <p>C3.5 Health and Safety</p> <p>C3.6 Environmental Management During Construction</p> <p>C3.7 Technical Specifications</p> <p><b>Part C4: Site Information (White)</b></p> <p>C4 Site Information</p> <p><b>Part C5: Drawings (White)</b></p> <p>C5 Drawings</p>
<b>F1.3</b>	<p><b>Interpretation</b></p> <p>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.</p>
<b>F.1.4</b>	<p><b>The Employer's Representatives are:</b></p> <p><b>SCM: Phumzile Mdlalose</b> - Telephone: 011 929-7000</p> <p>E-mail Address: <a href="mailto:Phumzile.mdlalose@erwat.co.za">Phumzile.mdlalose@erwat.co.za</a>/<a href="mailto:Brenda.matlala@erwat.co.za">Brenda.matlala@erwat.co.za</a></p> <p><b><u>Technical:</u> Mr Lehlohonolo Maneli</b> - 011 929 7000.</p> <p>E-mail Address: <a href="mailto:lehlohonolo.maneli@erwat.co.za">lehlohonolo.maneli@erwat.co.za</a></p> <p>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</p>

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	<p>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.</p> <p>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.</p>
<b>F.1.5</b>	<p><b>Reject or Accept</b></p> <p>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.</p>
<b>F.2.1</b>	<p><b>CIDB Requirements</b></p> <p>Only those tenderers 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 <b>7 EP class</b> of construction work, are eligible to have their tenders evaluated.</p> <p>Joint ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> <li>1. Every member of the joint venture is registered with the CIDB:</li> <li>2. The lead partner must be registered in a contractor grading designation not lower than one level below the required grading designation in the class of construction works under consideration. Please consult the CIDB website for the provisions for joint venture submission.</li> <li>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 a <b>7 EP class</b> of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.</li> <li>4. The bulk of the work for this Contract is Mechanical, however it also includes civil, electrical and control &amp; 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 Tenderers submissions.</li> </ol>
<b>F.2.2</b>	<p><b>Cost of Bidding</b></p> <p>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.</p>
<b>F.2.3</b>	<p><b>Check documents</b></p> <p>The Tenderer 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</p>

Contractor

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	Tenderer shall immediately notify the Employer's Agent 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.	
<b>F.2.4</b>	<b>Confidentiality and copyright of documents</b>  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.	
<b>F2.5</b>	<b>Reference Documents</b>  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	
<b>F2.6</b>	<b>Acknowledge Addenda</b>  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.	
<b>F.2.7</b>	<b>The arrangements for a compulsory virtual briefing/clarification meeting are:</b>	
	<b>Tuesday, 28th March 2023 at 09h00</b>	<b>Location: VIRTUAL BRIEFING SESSION,</b> <a href="https://erwatza.zoom.us/join/9tJpfmtrjovHt2Al_Ywcp39vN5bZAW83ouT">https://erwatza.zoom.us/join/9tJpfmtrjovHt2Al_Ywcp39vN5bZAW83ouT</a> <b>Registration is required</b>
	No individual should represent more than one bidder at the compulsory briefing session. Non-completion in full of the fields required on the attendance register may lead to automatic disqualification.  At least one member of the JV be represented at the compulsory clarification meeting.	
<b>F.2.8</b>	<b>Seek clarification</b>  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.	
<b>F.2.10</b>	<b>Pricing the Tender</b>  State the rates and prices in South African Rand (ZAR). Prices shall be FIXED and FIRM for the duration of the first 12 months of the Contract from the date of signing of the service level agreement. Price increments will be based on MBD 3.2 pricing structure annually on the anniversary of the signing of the service level agreement.	
<b>F.2.11</b>	<b>Alterations to documents</b>  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.	

Contractor

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F.2.13	<p><b>Submitting a Tender offer</b></p> <p>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:</p> <p><b><u>“BID ERW2302/03: APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON ‘AS AND WHEN REQUIRED’ BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS”</u></b></p> <p>and must be placed in Tender Box at ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein / Bronkhorstspuit), Kempton Park.</p> <p>Accept that the tender submitted to the employer cannot be withdrawn or substituted. <b>No substitute tender offers will be considered.</b></p> <p>All Tenders received by ERWAT will remain in the Company's possession.</p>
F.2.14	<p><b>Information and data to be completed in all respects</b></p> <p>To facilitate review of this Tender by ERWAT, it is requested that submissions conform to the following format:</p> <ol style="list-style-type: none"> <li><b>Coversheet:</b> 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.</li> <li><b>Executive Summary:</b> 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.</li> <li><b>Relevant Experience and Reference Projects:</b> Information of similar sized projects completed by the Tenderer (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.</li> <li><b>Project Team:</b> 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.</li> <li><b>Project Schedule:</b> 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.</li> <li><b>Electrical and C&amp;I:</b> All information asked for regarding the electrical and C&amp;I equipment shall be included here.</li> </ol> <p>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 <b>“FORM C Authority of Signatory”</b>.</p>

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	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.
<b>F.2.15</b>	<b>Monday, 17th April 2023 @ 12h00</b>
<b>F.2.16</b>	<b>Tender offer validity</b>  The Tender offer validity period is 120 Days.
<b>F2.18</b>	<b>Provide other information</b>  <b>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:</b>  (1) Proof of SARS Tax status (pin issued by the South African Revenue Services); (2) Completion of MBD 2, 3.3, 4, 5, 6.1, 7.1, 8 and 9 forms (3) Copy of municipal Statement not older than 3 months or letter from landlord stating that rates and taxes are not in arrears for more than 90 days from date of closing of bid. (4) In case of Joint Venture – the Joint Venture Agreement  <b>NB: - Please note that non-compliance to specification may be deemed as an automatic disqualification. Service Providers must quote for all aspects as per the specification.</b>
<b>F3.4</b>	<b>Opening of tender</b>  Tenders will be opened in public at the ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein / Bronkhorstspuit), Kempton Park.
<b>F3.5</b>	<b>Two-envelope System</b>  A two-envelope procedure will <b>NOT</b> be followed.
<b>F3.6</b>	<b>Non-disclosure</b>  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.

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F3.9	<p><b>Arithmetical errors, omissions and discrepancies</b></p> <p>ERWAT is to check BID offers for arithmetical errors in the following manner:</p> <ul style="list-style-type: none"> <li>a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.</li> <li>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.</li> <li>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 tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.</li> </ul> <p>Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.</p>
F3.11	<p><b>1. Evaluation of tender offers</b></p> <p>The Bidders 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.</p> <p>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 <b>REJECTION OF THE TENDER</b>, for example:</p> <ul style="list-style-type: none"> <li>▪ Proof of SARS Tax status (pin issued by the South African Revenue Services);</li> <li>▪ Non submission of company registration certificates.</li> <li>▪ Pages that were to be completed being removed from the Tender document and have therefore not been submitted.</li> <li>▪ Failure to fully complete form of offer.</li> <li>▪ Scratching out without initialing next to the amended rates or information.</li> <li>▪ Writing over / painting out rates / the use of Tippex/correction fluid or any erasable ink.</li> <li>▪ Failure to attend compulsory briefing meetings</li> <li>▪ The Tender has not been properly signed by a party having the authority to do so, according to the <b>Form C – “Authority for Signatory”</b>.</li> <li>▪ No authority for signatory submitted.</li> <li>▪ Particulars required in respect of the proposal have not been provided: non- compliance of Tender requirements and/or specifications.</li> <li>▪ The Bidder's attempts to influence, or has in fact influenced the evaluation and/or awarding of the contract.</li> <li>▪ The Proposal has been submitted after the relevant closing date and time.</li> <li>▪ 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).</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul> <p><b>2. Good standing with SA Revenue Services</b></p> <ul style="list-style-type: none"> <li>▪ Determine whether the bidders tax matters are in order as provided for by SARS.</li> <li>▪ The Bidder <u>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.</u></li> </ul> <p>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.</p> <p><b>3. Penalties</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>▪ Cancel the contract and recover all losses or damages incurred or sustained from the Bidder.</li> <li>▪ Impose a financial penalty of twice the theoretical financial preference associated with the claim, which was made in the Tender.</li> <li>▪ 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.</li> </ul> <p><b>4. Evaluation Criteria</b></p> <p>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.</p> <ol style="list-style-type: none"> <li>1) Pre compliance evaluation to be done and pre-qualified bidders goes through for the functionality evaluation.</li> <li>2) Score Bid evaluation points for price and preference points</li> <li>3) Calculate total Bid evaluation points, to two decimal places</li> <li>4) Rank Bid offers from the highest number of Bid evaluation points to the lowest</li> <li>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.</li> </ol>
	<p><b>FUNCTIONALITY CRITERIA: -</b></p> <p>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.</p>

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	<p>Functionality criteria maximum points in respect of each criterion shall be as set out at the bottom of this table.</p> <p>All Tender submission will be evaluated by at least three evaluators against the Table below. Tenderers 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.</p> <p><b>Tender evaluation points</b></p> <p>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:</p> <p>The points allocation for this Tender is:</p> <ul style="list-style-type: none"> <li>a) Price: 80</li> <li>b) Specific Goals: 20</li> </ul> <p>Regulations of disputes, objections, complaints and queries will be handled in accordance with the Supply Chain Management Policy of ERWAT.</p>
<b>F3.17</b>	<p><b>Provide copies of the contracts</b></p> <p>The number of paper copies of the signed contract to be provided by the Employer is <b>one</b>.</p>
	<p>The additional conditions of the proposal are:</p> <ol style="list-style-type: none"> <li>1) ERWAT may also request that the Bidder provide written evidence that his financial, labour and resources are adequate for carrying out the project.</li> <li>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.</li> <li>3) The rates of the highest scoring bidder subject to market evaluation (market related rate) may be offered to the highest scoring bidders.</li> </ol>

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## 1.1 **TECHNICAL / FUNCTIONALITY EVALUATION**

Potential service providers will have to achieve a minimum of **75 points out of 100** for their technical proposals before their financial proposals and specific goals 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 suitability of the bidder's proposed Plant and Equipment.
- The quality of the methodology proposed.
- The qualifications and experience of the key staff proposed.
- The suitability of Sub-Contractors proposed.

No alteration of technical / 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.

### 1.1.2 **General Note**

- The rates of the highest scoring bidder subject to market evaluation (market related rate) may be offered to the remaining highest scoring bidders.

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### **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
<b>Company Experience</b> Only signed completion certificates and reference letters on the letterheads of the previous client/employer with a clear description of works, contract value, contact person, and contact details of the contact person (day telephone number and company email address) will be accepted. Submission must be dated and not older than ten (10) years, from the date of completion.	<b>Company experience in Installation of Generators. Please provide reference letter or completion certificate</b> <b>Bidders are required to submit signed reference letters and or completion certificates from on bidders' client's letterhead</b> <ul style="list-style-type: none"> <li>4 and more Letters/Certificates = 40</li> <li>3 Letters/Certificates = 30</li> <li>2 Letters/Certificates = 20</li> <li>1 Letter/Certificate = 10</li> <li>None, uncontactable or denied references = 0</li> </ul>	40
<b>Expertise of key staff</b>	<b>Expertise of key staff in the installation of Generators: Experience will be evaluated based on post qualification attainment up to date of tender closure.</b> <u><b>Project Manager with a minimum of National Diploma in Electrical Engineering (Post qualification)</b></u> <ul style="list-style-type: none"> <li>0 – 47 Months Experience = 0</li> <li>48 - 59 Months Experience = 10</li> <li>60 - or more Months experience = 20</li> </ul> <u><b>Electrician with Trade Test (Post qualification)</b></u> <ul style="list-style-type: none"> <li>0 – 23 Months Experience = 0</li> <li>24 - 35 Months Experience = 10</li> <li>36 - or more Months experience = 20</li> </ul>	40
<b>Letters of Support</b>	<b>Manufacturer's/(Supplier of Engine Statement of Support = 20</b> The letter shall be addressed to the bidder, and clearly stipulate that the manufacturer of ( or Official Supplier) of the Engine will provide Installation and Operational Support for the equipment. Failure to supply the above letter will result in the bidder scoring 0 points Bidders may supply letters from the official suppliers, provided that the bidder provides an agreement between the official supplier and the Original Equipment Manufacturer.	20
<b>TOTAL</b>	<b>Bidder must score a minimum of 75 points to be considered for further evaluation</b>	100

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND  
INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND  
WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) 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 keypositions.
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 wilful misrepresentation by that Bidder to induce the contract. In such event the Employer has the discretionary right to terminate the contract.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

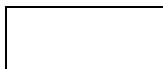
Witness 2



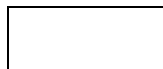
**THE BIDDER MUST COMPLETE AND SIGN THE FOLLOWING RETURNABLE SCHEDULES:**

**RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION PURPOSES**

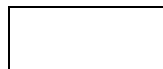
MBD 1	INVITATION TO BID
MBD 2	TAX CLEARANCE REQUIREMENTS
MBD 3.2	PRICING STRUCTURE: NON-FIRM PRICES
MBD 4	DECLARATION OF INTEREST
MBD 5	DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)
MBD 6.1	PREFERENCE POINTS CLAIM FORM
MBD 7.1	CONTRACT FORM: PURCHASE OF GOODS/SERVICES
	PART 1: TO BE COMPLETED BY THE BIDDER
	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	<p>MUNICIPAL SERVICES, RATES AND TAXES OR RENTAL AGREEMENT WITH LANDLORD:</p> <p>Copy of Municipal Statement not older than 3 months before date of closing of bid OR Letter from landlord stating that you are renting from his/her property OR a Copy of Lease agreement and Contact details.</p> <p>Rates and taxes must not be in arrears for longer than 90 (ninety) days of date of closing of bid.</p>
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
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	EXPERTISE OF THE KEY PERSONNEL



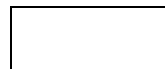
Contractor



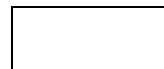
Witness 1



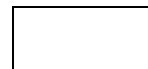
Witness 2



Employer



Witness 1



Witness 2

FORM K	REGULATORY PROVISIONS
FORM L	COPY OF COMPANY REGISTRATION DOCUMENTS

**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)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**T2.1.1 IMPORTANT: Required Returnable Documentation:**

Please ensure that the following supporting documents are attached to your Bid Document. Failure to submit the below mentioned documents will result in disqualification of your bid.

Item	Description of Document/Proof Sought	To be completed by the Bidder: Please fill in Yes or No if Proof/ Documentation attached	For Office Use Only Verified by SCM Official: Please fill in Yes or No if Proof/ Documentation attached
1	A valid Tax Clearance Certificate/SARS issued pin		
2	Certified Copy of ID documents of owners/members/shareholders (see Bidders Information Section).		
3	Copy of Municipal Statement not older than 3 months OR Letter from landlord stating that you are renting from his/her property OR Copy of Lease agreement and Contact details (Statement and arrears should not be older than 3 months)		
4	Current Certificate of Good Standing from Compensation Commissioner		
5	Expertise of the Key Personnel		
6	Occupational Health & Safety Plan		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**T2.1.2 Other Returnable Documents required for the evaluation**

Item	Description of Document/Proof Sought	To be completed by the Bidder: Please fill in Yes or No if Proof/ Documentation attached	For Office Use Only Verified by SCM Official: Please fill in Yes or No if Proof/ Documentation attached
1.	Copy of Company/ Registration Documents (see Bidders Information Section). – Failure to submit will result in disqualification.		
2.	For companies: A letter from the auditors confirming shareholding percentages. – Failure to submit will result in disqualification.		
3.	Audited Financial Statements for the past three financial years - failure to submit this information will result in disqualification		
4.	Certificate that there are no outstanding commitments for municipal rates and taxes for more than 30 days – failure to submit this information will result in disqualification.		
5.	Proof of CSD registration (Supplier number and unique reference ID) – failure to supply this information will result in disqualification. This tender may not be awarded to a person who is not registered on the CSD database.		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND  
INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND  
WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**


T2.2    RETURNABLE SCHEDULES

  
*Contractor*

  
*Witness 1*

  
*Witness 2*

  
*Employer*

  
*Witness 1*

  
*Witness 2*

## **RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES**

### **COMPULSORY ENTERPRISE QUESTIONNAIRE**

The successful bidder will be required to fill in and sign a written Contract Form (MBD7).

Completed Tender documents with attached documents, if any, must be completed in Ink and submitted in a sealed envelope and clearly marked "**CONTRACT NO: ERW2302/03**" to be placed in Tender Box at ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein / Bronkhorstspuit), Kempton Park.

*Bidders should ensure that bids are in the tender box at the closing time and date, including couriered documents. Any late documents will not be accepted for consideration.*

The box is generally open during office hours: 07:00 – 17:00 Mondays to Fridays.

**N.B** :: Bidders must ensure that they submit the full bidding document with all the pages, all requested information completed and signed, including all supporting documents in the areas provided.

*All bids must be submitted on the official forms – (not to be re-typed). Failure to complete the document in full may result in disqualification.*

*Bids completed in pencil, re-typed or where correction tape/fluid is used will be regarded as invalid bids.*

THIS BID IS SUBJECT TO THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

THIS BID WILL BE EVALUATED AND ADJUDICATED ACCORDING TO THE FOLLOWING CRITERIA:

1. Relevant specifications and technical proposals
2. Value for money
3. Capability to execute the contract
4. PPPFA & related regulations
5. Standard conditions of bidding
6. Special conditions of contract
7. General conditions of contract
8. Supporting documents where required

**NB:** NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (see definition on MBD 4 attached)

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

**In the case of a Joint Venture – This page is to be completed and submitted in respect of each partner**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

NAME OF ENTERPRISE							
PHYSICAL ADDRESS:							
POSTAL ADDRESS:							
CONTACT PERSON							
TEL NO: _____		CELL NO: _____					
FAX NO: _____		EMAIL: _____					
COMPANY REGISTRATION NUMBER:							
VAT NUMBER:		TAX REF NUMBER:					
CENTRALISED SUPPLIER DATABASE (CSD) NUMBER:		MAAA _____					
CIDB REGISTRATION NUMBER							
CIDB GRADING							
ERWAT VENDOR NUMBER (NOT COMPULSORY):							
<b>BIDDERS OFFER: Please note 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.</b>							
TOTAL NUMBER OF ITEMS OFFERED							
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS/SERVICES/WORKS OFFERED?			<table border="1"> <tr> <td>Yes</td> <td></td> <td>No</td> <td></td> </tr> </table>	Yes		No	
Yes		No					

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

YES		NO	
-----	--	----	--

NAME AND SURNAME:

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SIGNATURE OF BIDDER:

---

CAPACITY UNDER WHICH THIS BID IS SIGNED:

---

DATE: 

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**ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE AND TECHNICAL INFORMATION MAY BE DIRECTED TO:**

**SUPPLY CHAIN BIDDING PROCEDURES:**

CONTACT PERSON: Ms. Phumzile Mdlalose

CONTACT DETAILS: (TEL) 011 929 7000

E-MAIL: [Public.tenders@erwat.co.za](mailto:Public.tenders@erwat.co.za)

**TECHNICAL QUERIES MAY BE DIRECTED TO:**

CONTACT PERSON: Mr. Lehlohonolo Maneli

CONTACT DETAILS: (TEL) 011 929 7000

E-MAIL: [Lehlohonolo.maneli@erwat.co.za](mailto:Lehlohonolo.maneli@erwat.co.za)

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Contractor

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Witness 1

--

Witness 2

--

Employer

--

Witness 1

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Witness 2



MBD 2

### **TAX CLEARANCE CERTIFICATE 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](http://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.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**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.

<b>TCS Details</b>	
<b>Tax payer name</b>	
<b>Trading Name</b>	
<b>Purpose of request</b>	TENDER
<b>Request Reference number</b>	
<b>PIN</b>	
<b>PIN EXPIRY DATE</b>	

**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: <b>ERW2302/03:</b>
Closing Time : <b>12:00 pm</b>	Closing Date: <b>Monday, 17th April 2023</b>

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 INCLUDED)
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Kindy refer to the Bill of Quantities.

- |   |  |   |
|---|--|---|
| - | Required by:                                     | <b>EKURHULENI WATER CARE WORKS</b>          |
| - | At:  | <b>INFRASTRUCTURE PROJECTS AND PLANNING</b> |
| - | Brand and model                                  | .....                                       |
| - | Country of origin                                | .....                                       |
| - | Does the offer comply with the specification(s)? | *YES/NO                                     |
| - | If not to specification, indicate deviation(s)   | .....                                       |
| - | Period required for delivery                     | .....                                       |
| - | Delivery:  | *Firm/Not firm                              |

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

\*Delete if not applicable

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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. <b>Note that Pt must always be the original bid price and not an escalated price.</b>
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.

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

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

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

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**MBD 3.2**

**PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS**

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=		

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**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<sup>2</sup>):

\_\_\_\_\_

4.4 Company Registration Number: \_\_\_\_\_

4.5 Tax Reference Number: \_\_\_\_\_

4.6 VAT Registration Number: \_\_\_\_\_

4.7 The names of all directors / trustees / shareholders 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?  
If so, furnish particulars.

**YES / NO**

\_\_\_\_\_  
\_\_\_\_\_

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

**YES / NO**

If so, furnish particulars.

\_\_\_\_\_  
\_\_\_\_\_

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Contractor

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Witness 1

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Witness 2

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Employer

--

Witness 1

--

Witness 2

- 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.

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- 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.

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- 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.

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- 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.

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---

- 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?

**YES / NO**

If so, furnish particulars.

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*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

5. Full details of directors / trustees / members / shareholders.

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.

<sup>2</sup> 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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**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

---

*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

**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:

**\* Delete if not applicable**

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.

---

---

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

---

---

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

---

---

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**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

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD 6.1

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

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

**1. GENERAL CONDITIONS**

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

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

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

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

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

1.3 Points for this tender shall be awarded for:

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

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

The maximum points for this tender are allocated as follows:

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

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

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## 2. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

### 2.1 POINTS AWARDED FOR PRICE

#### 2.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

**80/20**

$$P_s = 80 \left( 1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

Where

P<sub>s</sub> = Points scored for price of tender under consideration

P<sub>t</sub> = Price of tender under consideration

P<sub>min</sub> = 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 (80/20 system) (To be completed by the organ of state)
EME or QSE 51% owned by women	4
EME or QSE 51% owned by youth	4
EME or QSE 51% owned by people with disabilities	4
EME or QSE 51% owned by military veterans	4
EME or QSE within the boundaries of Ekurhuleni Municipality	4

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 limited to the maximum available points.

e.g. 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 = 4 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.

  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

### 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:** .....

**ADDRESS:** .....

.....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## 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 **ERW2302/03** 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);
    - Specific Goals (refer to MBD 6.1)
    - 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. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) .....

CAPACITY .....

SIGNATURE .....

NAME OF FIRM .....

DATE .....

WITNESSES

1 .....

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## 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 **ERW2302/03** 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.
4. I confirm that I am duly authorized to sign this contract.

SIGNED AT .....ON.....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP



WITNESSES

1. ....  
.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2



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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

### **CERTIFICATION**

I, THE UNDERSIGNED (FULL NAME \_\_\_\_\_)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM 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**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**MBD 9**

**CERTIFICATE OF INDEPENDENT BID DETERMINATION**

1. This Municipal Bidding Document (MBD) must form part of all bids<sup>1</sup> 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).<sup>2</sup> Collusive bidding is a *per 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:

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**CERTIFICATE OF INDEPENDENT BID DETERMINATION**

I, the undersigned, in submitting the accompanying bid:

**DESCRIPTION: APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**

**PROJECT NO: ERW2302/03**

in response to the invitation for the bid made by:

**EKURHULENI WATER 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<sup>3</sup> 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

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (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**

*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

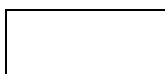
**FORM A**

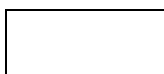
**MUNICIPAL SERVICES, RATES AND TAXES CLEARANCE CERTIFICATE FOR SUPPLY CHAIN  
MANAGEMENT PURPOSE**

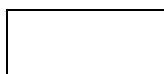
The purpose of this form is to obtain prove that municipal services, rates and taxes of the service provider are **not more than three months in arrears** with the relevant municipality / landlord in the municipal area where the service provider conduct his / her business. Kindly attach the latest municipal rates and taxes account not older than 3 months from date of advertising of bid.

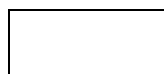
**Where bidders are not owners of a property and cannot submit a copy of the municipal account, the following must be completed together with a Rental/lease agreement:**

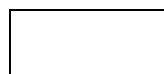
<b>( TO BE COMPLETED BY THE LANDLORD)</b>		
Name of the Landlord:		
Property Physical Address:		
<b>Please tick below</b>	<b>Yes</b>	<b>No</b>
Rental:                      in arrears for more than 3 months		
Municipal services:       in arrears for more than 3 months		
Landlord Signature:		
Date: _____		
<b>Landlord's business stamp here (where applicable)</b>		


  
*Contractor*

  
*Witness 1*

  
*Witness 2*

  
*Employer*

  
*Witness 1*

  
*Witness 2*

**FORM B**

**CONFIRMATION OF REGISTRATION ON NATIONAL TREASURY CENTRALISED SUPPLIER  
DATABASE**

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

\_\_\_\_\_  
*Contractor*

\_\_\_\_\_  
*Witness 1*

\_\_\_\_\_  
*Witness 2*

\_\_\_\_\_  
*Employer*

\_\_\_\_\_  
*Witness 1*

\_\_\_\_\_  
*Witness 2*

### **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 Man Concern:** This shall be clearly stated and all documents shall be signed accordingly.

---

Details of person responsible for Bid Document process:

Name :

-----

Contact number :

-----

Office address :

-----

Signatories for close corporations and companies shall confirm their authority by attaching to this form a **duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be.

---

### **PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



"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 CAPITALS)**

**SIGNED ON BEHALF OF THE COMPANY** \_\_\_\_\_

**IN HIS CAPACITY AS** \_\_\_\_\_

**DATE** \_\_\_\_\_

**FULL NAMES OF SIGNATORY** \_\_\_\_\_

**AS WITNESSES:** 1. \_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_  
*Contractor*

\_\_\_\_\_  
*Witness 1*

\_\_\_\_\_  
*Witness 2*

\_\_\_\_\_  
*Employer*

\_\_\_\_\_  
*Witness 1*

\_\_\_\_\_  
*Witness 2*

**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.

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

**N.B.: THE DULY SIGNED AND DATED ORIGINAL OR CERTIFIED COPY OF AUTHORITY OF SIGNATORY ON COMPANY LETTERHEAD SHOULD BE INCLUDED IN THE RETURNABLE DOCUMENTS PACK.**

\_\_\_\_\_  
*Contractor*

\_\_\_\_\_  
*Witness 1*

\_\_\_\_\_  
*Witness 2*

\_\_\_\_\_  
*Employer*

\_\_\_\_\_  
*Witness 1*

\_\_\_\_\_  
*Witness 2*

**FORM D**

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

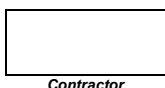
**Notes to Bidder:**

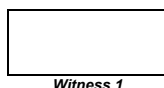
1. The Bidder shall attach to this form a letter from the bank confirming the bank account and details. Failure to provide the required letter with the Bid Document submission shall render the Bidder's offer unresponsive.
2. The Bidder's banking details as they appear below shall be completed.
3. In 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.

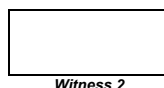
<b>BANK NAME:</b>											
<b>ACCOUNT NAME:</b> (e.g. ABC Civil Construction cc)											
<b>ACCOUNT TYPE:</b> (e.g. Savings, Cheque etc)											
<b>ACCOUNT NO:</b>											
<b>ADDRESS OF BANK:</b>											
<b>CONTACT PERSON:</b>											
<b>TEL. NO. OF BANK / CONTACT:</b>											
How long has this account been in existence:	<table border="1"> <tr> <td>0-6 months</td> <td></td> </tr> <tr> <td>7-12 months</td> <td></td> </tr> <tr> <td>13-24 months</td> <td></td> </tr> <tr> <td>More than 24 months</td> <td></td> </tr> </table>	0-6 months		7-12 months		13-24 months		More than 24 months		(Tick which is appropriate)	
0-6 months											
7-12 months											
13-24 months											
More than 24 months											

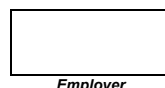
**Signature on behalf of Bidder**

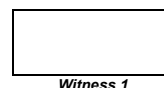
**N.B.: ORIGINAL LETTER FROM BANK OR BANK STATEMENT (NOT OLDER THAN THREE MONTHS) SHOULD BE INCLUDED IN THE RETURNABLE DOCUMENTS PACK.**

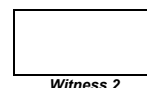
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

FORM E

RECORD OF ADDENDA TO BID DOCUMENTS

We confirm that the following communication received from the Employer before the submission of this BID DOCUMENT offer, amending the BID DOCUMENT documents, have been taken into account in this BID DOCUMENT offer:		
	Date	Title of Details

SIGNATURE ON BEHALF OF BIDDER

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.

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:** \_\_\_\_\_

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM G

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT /PLAN (WHERE APPLICABLE)

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM H

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

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM I

CURRENT CERTIFICATE OF GOOD STANDING FROM COMPENSAION COMMISSIONER

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



FORM J

EXPERTISE OF THE KEY PERSONNEL

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM K

**REGULATORY PROVISIONS**

Bidders are required to have a CIDB 7 EP grading.

---

*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

FORM L

**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. **JOINT VENTURES, TRUSTS OR CONSORTIUM**

- Copy of the Joint Venture Agreement between all the parties,
- As well as the documents in (1) or (2) and (5) of each Joint Venture member.

A trust, consortium or joint venture, will be able to claim for points for their specific goals provided that the entity submits a valid signed agreement.

Bidders must submit concrete proof of the existence of joint ventures and/or consortium arrangements. National Treasury will accept signed agreements as acceptable proof of the existence of a joint venture and/or consortium arrangement.

The joint venture and/or consortium agreements must clearly set out the roles and responsibilities of the Lead Partner and the joint venture and/or consortium party. The agreement must also clearly identify the Lead Partner, with the power of attorney to bind the other party/parties in respect of matters pertaining to the joint venture and/or consortium arrangement.

4. **FOR PARTNERSHIP**

- Certified Copies of the ID's of the partners

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

- Certified Copy of ID

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR  
ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY  
SIX (36 NO.) MONTHS**

**C. AGREEMENTS AND CONTRACT DATA**

**Part C1: Agreements and Contract Data**

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Occupational Health and Safety
- C1.4 Corporate Governance Breach Clause

**Part C2: Pricing Data**

- C2.1 Pricing Instructions
- C2.2 Schedule of quantities

**Part C3: Scope of Work**

- C3.1 Scope of Work

**Part C4: Site Information**

- C4 Site Information

**Part C5: Drawings and other Information provided by the Employer**

- C5 Drawings

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR  
ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY  
SIX (36 NO.) 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 Occupational Health and Safety

C1.4 Corporate Governance Breach Clause

---

*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

## 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: ERW2302/03 APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) 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



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

## 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's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data 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) .....

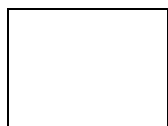
Name(s) .....

Capacity .....

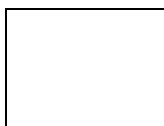
For the Bidder .....  
(Name and address of organisation)

Name & Signature

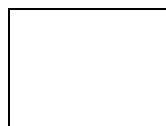
Of Witness .....  
Name Date



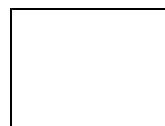
Contractor



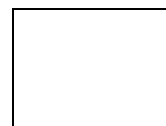
Witness 1



Witness 2



Employer



Witness 1



Witness 2

## **SCHEDULE OF DEVIATIONS**

### **Notes:**

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

.....



*Contractor*



*Witness 1*



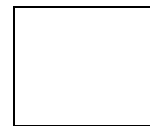
*Witness 2*



*Employer*



*Witness 1*



*Witness 2*



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:**

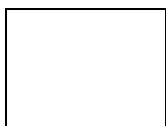
Signature(s) .....  
Name(s) .....  
Capacity .....  
For the Bidder .....  
(Name and address of organisation)

Name & Signature  
Of Witness .....  
Name Date

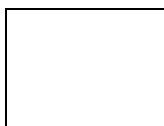
**FOR THE EMPLOYER**

Signature(s) .....  
Name(s) .....  
Capacity .....  
For the Bidder .....  
(Name and address of organisation)

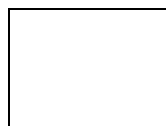
Name & Signature  
Of Witness .....  
Name Date



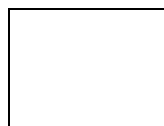
Contractor



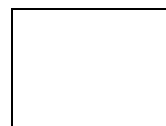
Witness 1



Witness 2



Employer



Witness 1



Witness 2

## C1.2 CONTRACT DATA

### GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works *General Conditions of Contract 2015 (GCC 2015, Third Edition)*

Documents can be ordered from SAICE who can be contacted through their website [www.saice.org.za](http://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 General Conditions of Contract 2015 are those set out hereafter under "Special Conditions of Contract".

### SPECIAL CONDITIONS OF CONTRACT

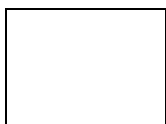
These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions of Contract shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2015 to the extent specified below, and shall take precedence and shall govern.

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 General Conditions of Contract 2015, 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.

*"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."*

The contract will commence on the last signature date of the Service Level Agreement.

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 affect. The final terms of payment (where applicable) will be negotiated with the bidder at the time for final close out of the contract



Contractor



Witness 1



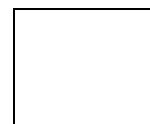
Witness 2



Employer



Witness 1

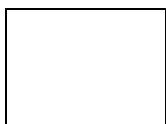


Witness 2

## AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

### DATA PROVIDED BY THE EMPLOYER

Clause	Data
	<b>Definitions</b>  The definitions contained in Clause 1.1 are hereby amended and/or supplemented as follows:
<b>SCC 1.1.1.13</b>	The Defects Liability Period is <b>12</b> months from the date of the Certificate of Completion.
<b>SCC 1.1.1.15 1.2.1.2</b>	The Name of the Employer is <b>ERWAT</b>  The address of the Employer is:  The Managing Director Hartebeestfontein Office Park R25 (Bapsfontein/Bronkhorstspuit) Kempton Park  Telephone: 011 929 7000
<b>SCC 3.2.3</b>	<b>Add the following:</b>  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 Municipal Manager 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.
<b>SCC 4.1.2</b>	<b>Add the following:</b>  “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”



Contractor



Witness 1



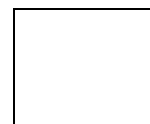
Witness 2



Employer



Witness 1



Witness 2

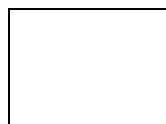
Clause	Data
<b>SCC 4.9.1</b>	<p><b>Add the following:</b></p> <p>"All equipment on site shall be in a good working order, and is to be in such a condition that it can achieve production rates which are typical of the industry standards.</p> <p>Should any equipment, in the opinion of the Employer's Agent, be substandard or breaks down frequently to such an extent that it affects the progress on the project, the Employer's Agent may instruct the Contractor to replace such equipment."</p>
<b>SCC 5.3.1</b>	<p><b>Add the following to 5.3.1:</b></p> <p>The documentation required before Commencement of the Works are:</p> <ul style="list-style-type: none"> <li>• Health &amp; Safety Plan (Refer to Cl. 4.3)</li> <li>• Initial Programme (Refer to Cl. 5.6)</li> <li>• Insurances (Refer to Cl. 8.6)</li> </ul>
<b>SCC 5.3.3</b>	<p><b>Add the following:</b></p> <p>The time to the documentation required before Commencement of the Works execution is <b>28</b> days</p>
<b>SCC 5.4.1</b>	<p><b>Add the following:</b></p> <p>The Commencement Date shall be the date the contractor is given possession of site.</p>
<b>SCC 5.8.1</b>	<p><b>Add the following:</b></p> <p>The special non-working days are the official builder's holiday plus all statutory public holidays.</p>
<b>SCC 5.12</b>	<p><b>Add the following:</b></p> <p>A delay caused by inclement weather conditions will be regarded as a delay only if, in the opinion of the Employer's Agent, 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.</p> <p>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.</p> <p>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.</p>
<b>SCC 5.12.2.1</b>	<p><b>Add the following:</b></p> <p>Extensions of time in respect of clause 5.12 in respect of abnormal rainfall shall be calculated using the following formula for each calendar month or part thereof:</p>



Contractor



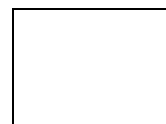
Witness 1



Witness 2



Employer



Witness 1



Witness 2

Clause	Data
	$V = (Nw - Nn) + \frac{(Rw - Rn)}{X}$ <p>Where:</p> <p>V = Extension of time in calendar days in respect of the calendar month under consideration.</p> <p>Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded.</p> <p>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.</p> <p>Rw = Actual average rainfall in mm recorded for the calendar month under consideration.</p> <p>Rn = Average rainfall in mm for the calendar month as derived from existing rainfall records as stated in the Site Information.</p> <p>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.</p> <p>If V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>SCC 5.13.1</b>	<p><b>Add the following:</b></p> <p>The penalty for failing to complete the works will be stipulated on the SLA.</p>



Contractor



Witness 1



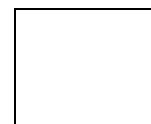
Witness 2



Employer



Witness 1

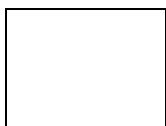


Witness 2

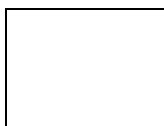
Clause	Data
<b>SCC 6.9.1</b>	All materials shall comply with the requirements of the South African Bureau of Standards, and shall bear the official standardization mark. Where SABS standard does not exist for a certain material, or a material does not bear the official standardization mark, the Client's Representatives approval of such material must be gained before use thereof.
<b>SCC 6.10.1.5</b>	<b>Add the following:</b>  The percentage advance on materials not yet built into the Permanent Works but received on site is <b>80 %</b> .
<b>SCC 7.2.1</b>	<b>Add the following:</b>  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 Employer's Agents approval of such material must be gained before use thereof.
<b>SCC 8.6.1.1.2</b>	<b>Add the following:</b>  The value of the materials supplied by the Employer to be included in the insurance sum is nil.

**PART 2: DATA PROVIDED BY THE CONTRACTOR**

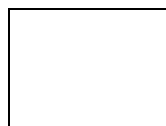
Sub- Clause	Data
<b>1.1.17</b>	<p>The Contractor is:</p> <p>Name:</p> <p>.....</p> <p>The Address of the Contractor is:</p> <p>Address (physical):</p> <p>.....</p> <p>.....</p>



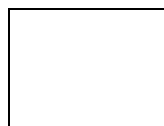
Contractor



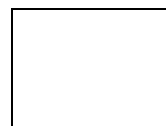
Witness 1



Witness 2



Employer









Witness 1



Witness 2

	<p>Address (postal):</p> <p>.....</p> <p>.....</p> <p>Telephone: .....</p> <p>Facsimile: .....</p> <p>E-mail: .....</p>
<b>1.1.22</b>	<p>Contractors Representative</p> <p>Name: .....</p> <p>Telephone: .....</p> <p>Facsimile: .....</p> <p>E-mail: .....</p>

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<i>Contractor</i>	<i>Witness 1</i>	<i>Witness 2</i>	<i>Employer</i>	<i>Witness 1</i>	<i>Witness 2</i>

**C1.3 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 APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHSS 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 WITNESSETH 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 –



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2



- (a) the date of the Final Approval Certificate issued in terms of Clause 5.16 of the General Conditions of Contract 2010 (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.

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 (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



Contractor



Witness 1



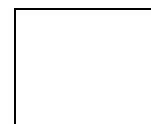
Witness 2



Employer



Witness 1



Witness 2

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) .....  
(Print)

(Name) .....  
(Print)

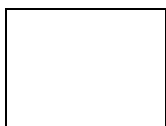
SIGNED FOR AND ON BEHALF OF THE MANDATORY..... :

Witness .....

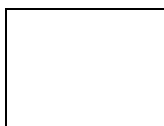
Witness .....

(Name) .....  
(Print)

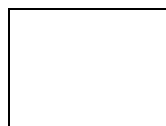
(Name) .....  
(Print)



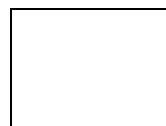
Contractor



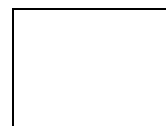
Witness 1



Witness 2



Employer



Witness 1



Witness 2

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 : .....

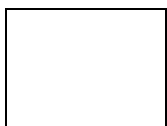
IN HIS/HER CAPACITY AS : .....

DATE : .....

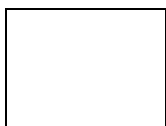
SIGNATURE OF SIGNATORY : .....

WITNESS : ..... WITNESS : .....

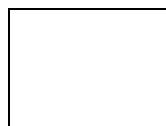
NAME (in capitals): ..... NAME : .....



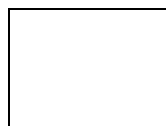
Contractor



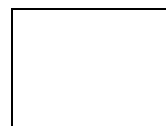
Witness 1



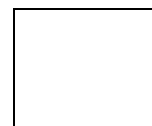
Witness 2



Employer



Witness 1



Witness 2

**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.



Contractor



Witness 1



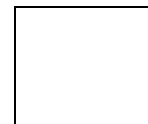
Witness 2



Employer



Witness 1



Witness 2

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: \_\_\_\_\_



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND  
INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND  
WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**

**C2 PRICING DATA**

C2.1 Pricing Instructions

C2.2 Schedule of Quantities

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*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

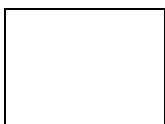


**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND  
INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND  
WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**

**C2.1 PRICING INSTRUCTIONS**

1. The applicable Conditions of Contract, the Contract Data, the Specifications (including the Project Specifications) and the Drawings shall be read in conjunction with the Bill of Quantities.
2. Prices shall be FIXED and FIRM for the duration of the first 12 months of the Contract from the date of signing of the service level agreement. Price increments will be based on MBD 3.2 pricing structure annually on the anniversary of the signing of the service level agreement.
3. The Bill comprises items covering the Contractor's profit and costs of general liabilities and of the construction of Temporary and Permanent Works.
4. Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Bill, he should note the fact that the Contractor is entitled, under various circumstances, to payment for additional work carried out and that the Engineer is obliged to base his assessment of the rates to be paid for such additional work on the rates the Contractor inserted in the Bill.
5. Descriptions in the Bill of Quantities 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.
6. Unless stated to the contrary, items are measured net in accordance with the Drawings without any allowance having been made for waste.
7. The amounts and rates to be inserted in the Bill of Quantities shall be the full inclusive amounts to the Employer for the work described under the several items. Such amounts shall cover all the costs and expenses that may be required in and for the construction of the work described, and shall cover the costs of all general risks, profits, taxes (but excluding value-added tax), liabilities and obligations set forth or implied in the documents on which the Tender is based.
8. The quantities set out in the schedule of quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the schedule of quantities, will be used to determine payments to the contractor.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

9. An amount or rate shall be entered against each item in the Bill of Quantities, whether or not quantities are stated. An item against which no amount or rate is entered will be considered to be covered by the other amounts or rates in the Bill.
10. The Tenderer shall also fill in a rate against the items where the words "rate only" appear in the amount column. Although no work is foreseen under these items and no quantities are consequently given in the quantity column, the tendered rates shall apply should work under these items actually be required.
11. Should the Tenderer group a number of items together and Tender one sum for such group of items, the single tendered sum shall apply to that group of items and not to each individual item, or should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed to be nil.
12. The tendered rates, prices and sums shall, subject only to the provisions of the applicable Conditions of Contract, remain valid irrespective of any change in the quantities during the execution of the Contract.
13. The quantities of work as measured and accepted and certified for payment in accordance with the applicable Conditions of Contract, and not the quantities stated in the Bill of Quantities, 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 and the quantities certified for payment.

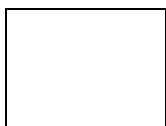
**Ordering of materials** is not to be based on the Bill of Quantities, but only on information issued for construction purposes.

14. For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

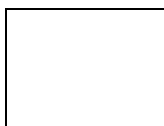
Unit	:	The unit of measurement for each item of work as defined in the Standardized, Project or Particular Specifications
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of work at which the Tenderer Tenders to do the work
Amount	:	The quantity of an item multiplied by the tendered rate of the (same) item
Sum	:	An amount tendered for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units

15. The units of measurement indicated in the Bill of Quantities are metric units. The following abbreviations may appear in the Bill of Quantities:

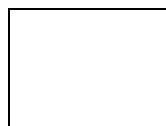
mm	=	millimetre
m	=	metre



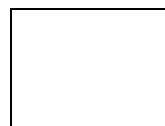
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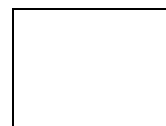
Witness 1



Witness 2



Employer



Witness 1

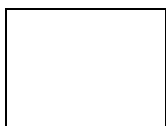


Witness 2

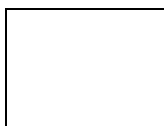
km	=	kilometre
km-pass	=	kilometre-pass
m <sup>2</sup>	=	square metre
m <sup>2</sup> -pass	=	square metre-pass
ha	=	hectare
m <sup>3</sup>	=	cubic metre
m <sup>3</sup> -km	=	cubic metre-kilometre
kW	=	kilowatt
kN	=	kilo Newton
kg	=	kilogram
t	=	ton (1 000 kg)
%	=	per cent
MN	=	mega Newton
MN-m	=	mega Newton-metre
PC Sum	=	Prime Cost Sum
Prov Sum	=	Provisional Sum
GSM	=	Global System for Mobile Communication

16. 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.
17. Rates tendered for BOQ items are deemed to include for all required tools, equipment, plant, materials, labour and supervision necessary to complete that bill item. Off cuts and wastage are to be included in the tendered rate.
18. Mistakes made by the Tenderer in completion of the BOQ 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 Tenderer. Failure to observe this Condition may lead to the Tender being disqualified.
19. By nature, a Design and Build Contract BOQ will contain a significant amount of sums. In order to facilitate payment during the Design Build period, it is in the Contractors interest to append a detailed Bill of Quantity for each sum detailing what the sum is made up of.
20. Bidders are required to price for the items requested and include all direct and indirect fees (e.g. Transportation and Packaging).  
Please note that all quantities stated in the Schedule of rates of this bid document are estimated quantities (indicative only and not guaranteed).
21. Due to the nature of this commodity, the bid document will only reflect a rate next to each line item. This rate is not an indication that ERWAT only intends to buy one of each product or make use of a service once.

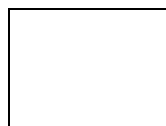
However, the rate is not an indication that ERWAT is under any obligation to procure all of the indicated products or services stated in the Schedule of rates during the duration of the contract.



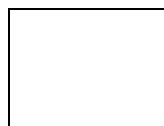
Contractor



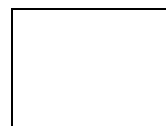
Witness 1



Witness 2



Employer



Witness 1



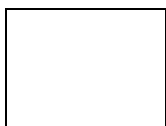
Witness 2



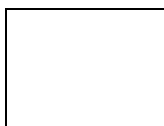
22. Invoicing and payment will be done on actual measured works/services rendered, singed off by the bidder and ERWAT's representative.

23. Please note that estimated quantities are for evaluation purposes only.

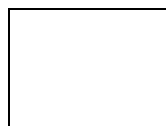
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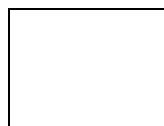
*Contractor*



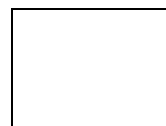
*Witness 1*



*Witness 2*



*Employer*



*Witness 1*



*Witness 2*

## C2.2 BILL OF QUANTITIES

### BID ERW2302/03

**APPOINTMENT OF SERVICE PROVIDER/S TO  
SUPPLY, DELIVER AND INSTALL GENERATORS  
FOR ERWAT WATER CARE WORKS ON 'AS AND  
WHEN REQUIRED' BASIS FOR A PERIOD OF  
THIRTY SIX (36 NO.) MONTHS**

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Contractor



Witness 1



Witness 2



Employer



Witness 1

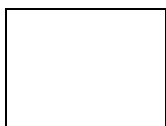


Witness 2

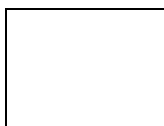
## C2.3 Pricing Schedule

### 1. Preliminary and General

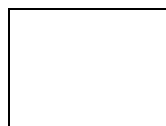
BILL OF QUANTITIES				
PRELIMINARY AND GENERAL				
ITEM	DESCRIPTION	UNIT	QTY	RATE
<b>Occupational Health and Safety Requirements</b>				
1.	General Health & Safety Obligations	Sum	1	
2.	Development of the Occupational Health and Safety File (Including Updating and Maintaining)	each	1	
3.	Health and Safety Officer	hr	1	
4.	Safety Signage: Information Boards and Signs including danger tapes as well as barricades (During Execution)	Sum	1	
<b>Planning, Execution and Quality Requirements</b>				
5.	Certificates of compliance for installation	each	1	
6.	Programme of Works, Cash Flow Projections, Bi-Weekly Progress Reports for the duration of the Contract and 4x Close-Out Report with O & M Manual, SOPs (Soft and Hard Copies) including Drawings (in both .pdf and .dwg formats)	each	1	
<b>Equipment Hire (Wet Rate)</b>				
7.	Truck, with 5 Ton Capacity Crane	Day	1	
8.	Truck, with 8 Ton Capacity Crane	Day	1	
9.	Lifting Equipment (20 Ton Crane) & Accessories	Day	1	
10.	Lifting Equipment (25 Ton Crane) & Accessories	Day	1	
11.	Lifting Equipment (35 Ton Crane) & Accessories	Day	1	
12.	Lifting Equipment (55 Ton Crane) & Accessories	Day	1	
13.	Lifting Equipment (90 Ton Crane) & Accessories	Day	1	



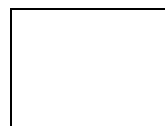
Contractor



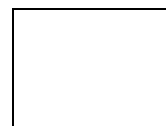
Witness 1



Witness 2



Employer



Witness 1



Witness 2

Installation Personnel				
14.	Site Supervisor	hr	1	
15.	Installation Fitter	hr	1	
16.	Installation Electrician	hr	1	
17.	Installation Rigger	hr	1	
18.	Draughtsperson	hr	1	
19.	Semi-Skilled Worker (Trade Aide Assistant)	hr	1	
20.	General Worker	hr	1	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**1. Generators**

200 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of 200 kVA Prime Generator <i>(Open Set)</i>	each	1	
2.	Supply of Sound Reduction Container <i>(Include Installing of 200 kVA Generator in the container) as per spec</i>	each	1	
3.	Supply and Install an Automatic Changeover panel for the 200 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 200 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	

Contractor

Witness 1

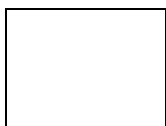
Witness 2

Employer

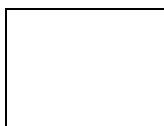
Witness 1

Witness 2

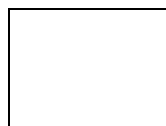
250 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of 250 kVA Prime Generator (Open Set)	each	1	
2.	Supply of Sound Reduction Container (Include Installing of 250 kVA Generator in the container) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 250 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 250 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	



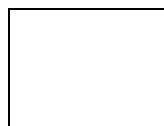
Contractor



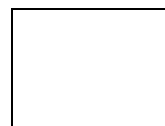
Witness 1



Witness 2



Employer



Witness 1



Witness 2

300 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of a 300 kVA Prime Generator (Open Set)	each	1	
2.	Supply of a Sound Reduction Container (Include Installing of 300 kVA Generator in the container) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 300 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 300 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

500 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of 500 kVA Prime Generator ( <i>Open Set</i> )	each	1	
2.	Supply of a Reduction Container ( <i>Include Installing of 500 kVA Generator in the container</i> ) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 500 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 500 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



600 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of 600 kVA Prime Generator (Open Set)	each	1	
2.	Supply of a Sound Reduction Container (Include Installing of 600 kVA Generator in the container) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 600 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 600 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

650 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of a 650 kVA Prime Generator ( <i>Open Set</i> )	each	1	
2.	Supply of a Sound Reduction Container ( <i>Include Installing of 650 kVA Generator in the container</i> ) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 650 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 650 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	

Contractor

Witness 1

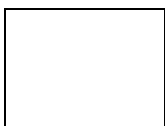
Witness 2

Employer

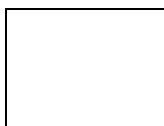
Witness 1

Witness 2

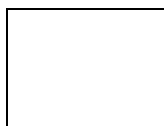
800 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of a 800 kVA Prime Generator (Open Set)	each	1	
2.	Supply of a Sound Reduction Container (Include Installing of 800 kVA Generator in the container) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 800 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 800 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	



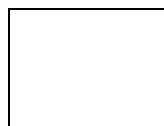
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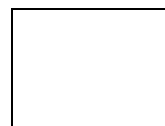
Witness 1



Witness 2



Employer



Witness 1



Witness 2

1000 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of a 1000 kVA Prime Generator ( <i>Open Set</i> )	each	1	
2.	Supply of a Sound Reduction Container ( <i>Include Installing of 1000 kVA Generator in the container</i> ) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 1000 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 1000 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	

Contractor

Witness 1

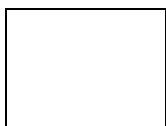
Witness 2

Employer

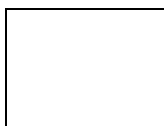
Witness 1

Witness 2

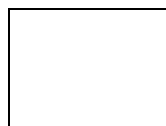
1250 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>Supply and Delivery - including double handling if stored, pre- installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	Supply of a 1250 kVA Prime Generator (Open Set)	each	1	
2.	Supply of a Sound Reduction Container (Include Installing of 1250 kVA Generator in the container) as per spec	each	1	
3.	Supply and Install an Automatic Changeover panel for the 1250 kVA Generator	each	1	
4.	Supply and install Free standing by-pass switch for the 1250 kVA Generator	each	1	
5.	Supply and install GSM Modem	each	1	
6.	Factory Testing for all equipment covered in the contract including quality control	each	1	
7.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	



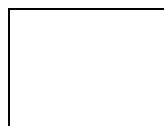
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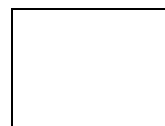
Witness 1



Witness 2



Employer



Witness 1



Witness 2

2000 kVA Prime Power Generator				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>SUPPLY and DELIVERY - including double handling if stored, pre-installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
	Supply of a 2000 kVA Prime Generator ( <i>Open Set</i> )	each	1	
1.	Supply of a Sound Reduction Container ( <i>Include Installing of 2000 kVA Generator in the container</i> ) as per spec	each	1	
2.	Supply and Install an Automatic Changeover panel for the 2000 kVA Generator	each	1	
3.	Supply and install Free standing by-pass switch for the 2000 kVA Generator	each	1	
4.	Supply and install GSM Modem	each	1	
5.	Factory Testing for all equipment covered in the contract including quality control	each	1	
6.	Site testing and commissioning of all equipment covered by this contract including quality control and handover	each	1	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## 2. Foundation and Excavation

ITEM	DESCRIPTION	UOM	QTY	Rate (Excl. VAT)
1.	Trenching, including backfilling and compacting for a width of 750mm depth x 750mm wide ( <b>Pickable ground</b> )	Meter	1	
2.	Trenching, including backfilling and compacting for a width of 750mm depth x 750mm wide ( <b>Clay ground</b> )	Meter	1	
3.	Trenching, including backfilling and compacting for a width of 750mm depth x 750mm wide ( <b>Hard ground</b> )	Meter	1	
4.	Trenching, including backfilling and compacting for a width of 750mm depth x 750mm wide ( <b>Concrete</b> )	Meter	1	
5.	Trenching, including backfilling and compacting for a width of 750mm depth x 750mm wide ( <b>Paved ground</b> )	Meter	1	
6.	Concrete foundation/Slab including soil and concrete cube tests for a <b>200 kVA Generator (Canopy type)</b>	Sum	1	
7.	Concrete foundation/Slab including soil and concrete cube tests for a <b>250 kVA Generator (Canopy type)</b>	Sum	1	
8.	Concrete foundation/Slab including soil and concrete cube tests for a <b>300 kVA Generator (Canopy type)</b>	Sum	1	
9.	Concrete foundation/Slab including soil and concrete cube tests for a <b>500 kVA Generator (Canopy type)</b>	Sum	1	
10.	Concrete foundation/Slab including soil and concrete cube tests for a <b>600 kVA Generator (Canopy type)</b>	Sum	1	
11.	Concrete foundation/Slab including soil and concrete cube tests for a <b>650 kVA Generator (Canopy type)</b>	Sum	1	
12.	Concrete foundation/Slab including soil and concrete cube tests for a <b>800 kVA Generator (Canopy type)</b>	Sum	1	
13.	Concrete foundation/Slab including soil and concrete cube tests for a <b>1000 kVA Generator (Canopy type)</b>	Sum	1	
14.	Concrete foundation/Slab including soil and concrete cube tests for a <b>1250 kVA Generator (Canopy type)</b>	Sum	1	
15.	Concrete foundation/Slab including soil and concrete cube tests for a <b>2000 kVA Generator (Canopy type)</b>	Sum	1	



Contractor



Witness 1



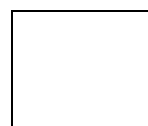
Witness 2



Employer



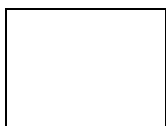
Witness 1



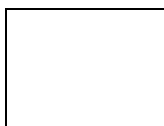
Witness 2

### 3. Electrical cables

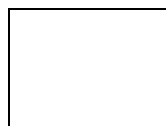
CATEGORY J: ELECTRICAL CABLES				
ITEM	DESCRIPTION	UNIT OF MEASURE	QUANTITY	RATE (VAT Excl.)
	<b>SUPPLY and DELIVERY - including double handling if stored, pre-installation activities, quality assurance, modifications and providing required certification as per this contract.</b>			
1.	1.5mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
2.	2.5mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
3.	4mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
4.	6mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
5.	10mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
6.	16mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
7.	25mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
8.	35mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
9.	50mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
10.	70mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
11.	95mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
12.	120mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
13.	150mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
14.	185mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
15.	240mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	
16.	300mm <sup>2</sup> x 4 core SWA Cable including termination kit	Meter	1	



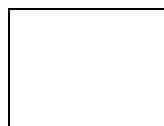
Contractor



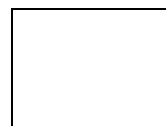
Witness 1



Witness 2



Employer



Witness 1



Witness 2



17.	10mm <sup>2</sup> x Bare Copper Earth Cable including termination kit	Meter	1	
18.	16mm <sup>2</sup> x Bare Copper Earth Cable including termination kit	Meter	1	
19.	70mm <sup>2</sup> x Bare Copper Earth Cable including termination kit	Meter	1	
20.	95mm <sup>2</sup> x Bare Copper Earth Cable including termination kit	Meter	1	
21.	120mm <sup>2</sup> x Bare Copper Earth Cable including termination kit	Meter	1	

A. Items not covered

- Mark Up on items not covered under the pricing schedule and are related to the Generators will be limited to a percentage mark-up on the actual price of the item not on the pricing schedule and not on profit:

The service provider is to note that ERWAT reserves the right to obtain quotes directly from the manufacturers.

Item amount incl. VAT	Percentage Mark-up
Up to R 2 000	5%
R 2 001 to R 5 000	5%
R 5 001 to R 10 000	5%
R 10 001 to R15 000	5%
Above R15 000	5%

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2302/03**

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY,  
DELIVER AND INSTALL GENERATORS FOR ERWAT WATER  
CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A  
PERIOD OF THIRTY SIX (36 NO.) MONTHS**

**C3 SCOPE OF WORK**

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A rectangular box intended for the signature of the Contractor.

*Contractor*

A rectangular box intended for the signature of Witness 1.

*Witness 1*

A rectangular box intended for the signature of Witness 2.

*Witness 2*

A rectangular box intended for the signature of the Employer.

*Employer*

A rectangular box intended for the signature of Witness 1.

*Witness 1*

A rectangular box intended for the signature of Witness 2.

*Witness 2*

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL  
GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS  
FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS**

	SECTION HEADING	COLOUR
<b>C3</b>	<b>Scope of Work</b>	<b>BLUE</b>
<b>C3.1</b>	<b>Description of work</b>	
<b>C3.2</b>	<b>Datasheet</b>	
<b>C3.3</b>	<b>Site establishment</b>	
<b>C3.4</b>	<b>Health and Safety</b>	
<b>C3.5</b>	<b>Environmental Management during Construction</b>	
<b>C3.6</b>	<b>Technical Specifications</b>	



*Contractor*



*Witness 1*



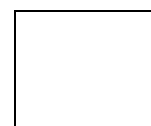
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*Employer*



*Witness 1*

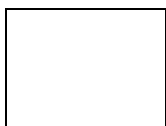


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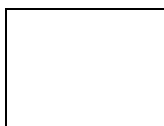
## DETAILED CONTENTS (VOLUME 3)

### PART C3 SCOPE OF WORKS

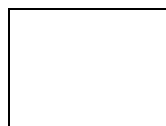
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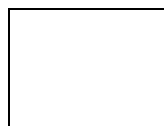
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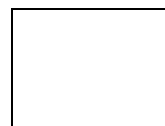
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### C3.1 DESCRIPTION OF THE WORKS

#### C3.1.1 Background

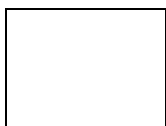
The East Rand Water Care Company (ERWAT) is responsible for the treatment of wastewater from domestic and industrial sources emanating within the City of Ekurhuleni. ERWAT water care works are designed to operate continuously (24 Hours/day). This makes the need for continuous power a necessity, hence the need to install back-up power in case of power failureMandatory Requirements.

Thus, ERWAT requires the services of an external service provider(s) to procure generators on an "as and when required" basis for a period of 36 months. The equipment mentioned is critical in the operation of ERWAT and therefore needs qualified and experienced service provider/s for the complete supply, delivery and installation. The current ERWAT team will be working in close relation with the appointed bidders throughout the contract period.

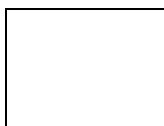
#### C3.1.2 General and Mandatory Requirements

##### C3.1.2.1 General Requirements

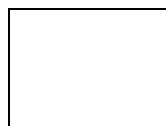
- a. Site induction training has to be completed before any work can be undertaken. (both general and site specific)
- b. The contractor must comply with the ERWAT Permit to Work and Safe operation procedures.
- c. All the relevant work permits and authorization has to be obtained before any work can be under taken.
- d. All work done and equipment supplied has to be in accordance with the applicable standards as listed in this document.
- e. 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.
- f. No equipment may be removed from site without written permission from the relevant plant manager.
- g. The installation of any equipment shall include the putting back into operation, testing, special testing (if required) and adjustments on the equipment.
- h. A project and quality control plan will be required for any installation of equipment.
- i. All the required tools, consumables, testing facilities, and other requirements to perform the work as per the Contract shall be provided by the contractor.
- j. 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.
- k. The Contract is for a duration of **Thirty-Six 36 (No.) Calendar Months**.
- l. Prices shall be **FIXED** and **FIRM** for the first 12 months of the **Contract**. **Price increments will be based on MBD 3.2 pricing structure annually on the anniversary of this tender**
- m. ALL new Equipment and newly supplied parts shall carry A MINIMUM twelve (12 No.) calendar months WARRANTY from date of acceptance by ERWAT representative



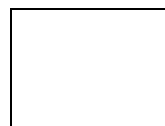
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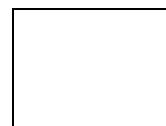
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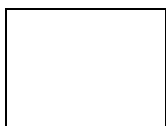


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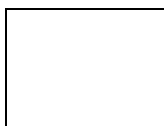
C3.1.2.2 Mandatory Requirements

Scope related Information and Documentation required:	
Please ensure that the following supporting documents are attached to your Bid Document. Failure to submit the below mentioned documents will result in disqualification of your bid.	
Item	Description of Document/Proof Sought
1.	The Contract CIDB Rating required for this Contract is 7 EP Bidders shall submit proof of Current Registration.

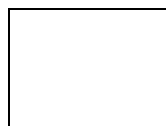
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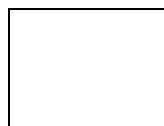
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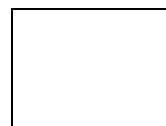
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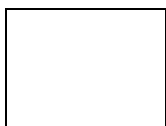
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### C3.1.3 Extent of the Works

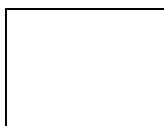
The Scope of Work for this Contract is (but not limited to): The Contractor will be required to perform the supply, delivery and installation work associated with this project, including the supply of selected equipment and items as detailed within the schedule of quantities. The supply of all such equipment and or components must fully comply with the specification contained in this document and must be approved by ERWAT. This scope of work shall include the furnishing of all labour, material and services for the Supply, Manufacture, Testing, Works Inspection, Delivery to Site, Offloading, Placing into Position, Site Assembly, Pre-commissioning, Commissioning Assistance and Rectification of Defects within the Warranty period of twelve (12 No.) months per section undertaken;

The Works described include all works required for the manufacture, supply, installation and commissioning of new Generators as and when required as follows:

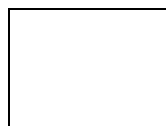
- Generator (Engine and Alternator assembling)
  - Containerising the generator into a sound attenuated container
  - Manufacture of electrical panel for the generators including automatic changeover panel and bypass switch
  - Generator controller system
  - GSM (Global system for Mobile Communication) modem
  - Electrical cables
- a. Isolate and remove old generators including:
- Disconnection of old electrical cables
  - Disconnect old changeover panel
- b. Measurements and sizing of the equipment. Upon appointment Contractor to confirm sizes and any auxiliaries for the required generator as per section allocated, before proceeding with the ordering of the new generator (s) as per the Bill of Quantities
- c. The Contractor shall be fully responsible for connecting the electrical cables from the new Generator to the Motor Control Centre (MCC) and Transformer
- d. Store as per instruction of the ERWAT Representative(s). NB: All disassembled equipment to be transport to Waterval Water Care Works storage facility



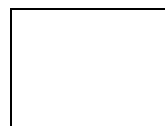
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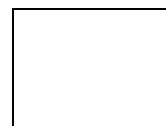
Witness 1



Witness 2



Employer



Witness 1



Witness 2

### C3.1.4 Generator Technical Specifications

The Contractor will be required to perform all detailed electrical design and installation work associated with this project, including the supply of the Generator, Automatic Changeover Panel and the GSM Modem as detailed within the schedule of quantities. The supply of all such equipment and or components must fully comply with the specification contained in this document and must be approved by the Engineer.

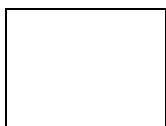
#### C3.1.4.1 Concrete Slab Technical Specification

- a. All concrete work is required to be in accordance with SANS 2001-CC1 and SANS 10100-2.
- b. The contractor is required to obtain written acceptance from the Project Manager for the use of any add-mixture or the use of ready mixed concrete, to pump concrete, or to use cement or cement blends other than Ordinary Portland Cement (OPC).
- c. Compaction of concrete is required to be done by means of mechanical vibrations only.
- d. The contractor is required to demonstrate, by means of a report from an approved Laboratory, that the aggregates do not exhibit excessive shrinking properties in accordance with SANS 1083 and is also required to demonstrate that the aggregates do not have a potential alkali silica reaction.
- e. Size of the slab; should be according to the dimensions of the Generator compartment, with a minimum 200 mm free space all round.
- f. Concrete slab top level must be a minimum of 300 mm above the highest point of the surrounding surface level.
- g. Concrete quality; should be of strength that will withstand the gross weight of the Generator during operation and non-operation.
- h. Reinforcement; should be of a suitable type that will accommodate the Generator.
- i. Civil design and drawing for the slab must be submitted for approval before construction can commence.
- j. Soil computation test by SANAS accredited lab in accordance with the civil design before concrete is poured.

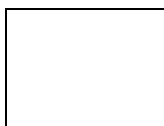
#### C3.1.4.2 Sound reduction weather protective enclosure

##### a. General

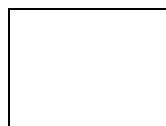
The intent of this section is to provide the details for a weather protective sound reduced generator set enclosure. The enclosure shall be of sheet metal construction as designed and manufactured by the generator supplier. The design and construction shall be modular in that the side panels, doors, and louvers shall be removable. The enclosure shall be weather proof suited for duty in all-weather condition 24/7/365.



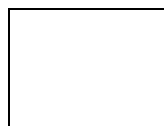
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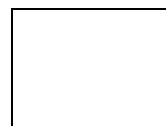
Witness 1



Witness 2



Employer



Witness 1



Witness 2



**b. Sound**

The sound reduction requirements are that the enclosure will be designed to provide a noise emission rating of less than 85 decibels at a maximum of one meter from the generator.

**c. Doors and louvers**

All doors on the enclosure shall be strategically located in areas as to allow ease of maintenance on the generator set and allow good access to and visibility of instruments, controls, engine gauges, etc. The doors shall be fitted with bolt-on, stainless steel hinges constructed with stainless steel hinge pins. Each door shall be fitted with adjustable square key lockable latches. All louvers shall be fitted with bird screens. All louvers shall be designed to the total engine/generator cooling air requirements

**d. Accessories**

Fuel, oil and water drains and the necessary fittings, hoses, shut-off valves, etc., shall be provided by the manufacturer. All the before-mentioned equipment shall not be accessible if the doors on the generator are closed. Rain dress for exhaust pipe and tail pipe extension shall prevent the entrance of rain and allow for the expansion and vibration of the exhaust piping without stress to the exhaust system. Rain dress shall be stainless steel and provided by the enclosure supplier.

**e. Lifting**

The generator set and enclosure shall be permanently equipped with provisions for fork lift and crane handling of the fully assembled and fully fuelled unit. The base of the unit shall be designed and manufactured as a heavy duty, formed steel construction with four (4) point lifting provision to support the calculated weight. The weight of the entire unit consisting of generator set, base, enclosure, and all other specified items including all liquids (i.e. fuel oil, lube oil, and cooling water) shall be calculated by the manufacturer and included in the data sheet.

**C3.1.4.3 Engine**

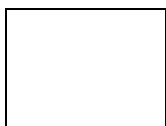
**a. General**

The engine must comply with the requirements as laid down in BS 5514-1:1996 and ISO 3046-1:1995 and must be of the atomized injection, compression ignition type, running at a speed not exceeding 1500 r.p.m. The minimum engine emission requirements must be in accordance with; EC No. 459/2012. Euro 6. The engine must be amply rated for the required electrical output of the set, when running under the site conditions. The starting period for either manual or automatic switching on until the taking over by the generating set, in one step, of a load equal to the specified site electrical output, shall not exceed 15 seconds. This must be guaranteed by the Tenderer.

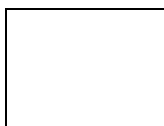
Turbo-charged engines will be accepted.

**b. Rating**

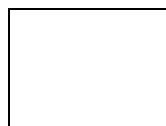
The set shall be capable of delivering the specified output continuously under the site conditions, without overheating. The engine shall be capable of delivering an output of 110 % of the specified output for one hour in any period of 12 hours consecutive running in accordance with BS 5514.



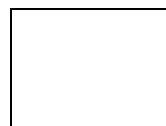
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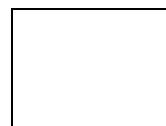
Witness 1



Witness 2



Employer



Witness 1



Witness 2

**c. Starting and stopping**

The engine shall be fitted with an electric starter motor and be easily started from cold, without the use of any special ignition devices under summer as well as winter conditions.

**d. Starter battery**

The set must be supplied a fully charged lead-acid type battery, complete with necessary electrolyte. The battery must have sufficient capacity to provide the starting torque stipulated by the engine makers. The battery capacity shall not be less than 120 Ah and shall be capable of providing three consecutive start attempts from cold and thereafter a fourth attempt under manual control of not less than 20 seconds duration each. The battery must be of the heavy duty "low maintenance" type, house in a suitable battery box.

**e. Cooling**

The engine must be air cooled type. For cooling, protection must be provided against running at excessive temperatures. The operation of this protective device must give a visual and audible indication on the switchboard. All air ducts for the cooling of the engine are to be allowed for. The air shall be supplied from the cooling fan cowling/radiator face to air outlet louvers in the plant room wall.

**f. Lubrication**

Lubrication of the main bearings and other important moving parts shall be by forced feed system. An automatic low oil pressure cut-out must be fitted, operating the stop solenoid on the engine and giving a visible and audible indication on the switchboard.

**g. Fuel pump**

The fuel injection equipment shall be supplied by the manufacturer.

**h. Fuel tank**

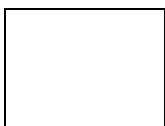
A fuel tank shall be installed in the base of the unit. The fuel tank shall be a double wall in-base fuel tank and shall be supplied with a lockable fill cap not accessible with the doors closed.

The capacity of the base tank shall permit operation of the generator for one day 24 hours at 75 percent load. All necessary fuel and vent lines for proper engine performance shall be provided as well as fuel level indication.

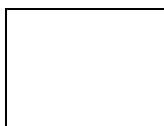
The tank shall be fitted with a suitable filter, a full height gauge glass, "low fuel level" alarm, giving an audible and visible signal on the switchboard as well as a low-low fuel level cut-out.

An electrically operated pump with sufficient length of oil resistant hose to reach 2m beyond the door shall be supplied, for each set for filling the fuel tank/s from 200 litre drums.

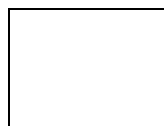
The interconnection fuel piping shall consist of copper tubes and the connection to vibrating components shall be in flexible tubing with armoured covering.



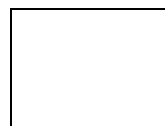
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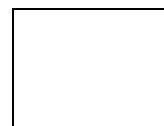
Witness 1



Witness 2



Employer



Witness 1



Witness 2

i. Governor

The speed of the engine shall be controlled by a governor in accordance with class A2 of BS 5514 of 1977 if not otherwise specified in the Technical Specification.

The permanent speed variation between no load and full load shall not exceed 4,5% of the normal engine speed and the temporary speed variation shall not exceed 10% External facilities must be provided on the engine, to adjust the normal speed setting by  $\pm 5\%$  at all loads zero and rated load.

j. Flywheel

A suitable flywheel must be fitted, so that lights fed from the set will be free from any visible flicker. The cyclic irregularity of the set must be within the limit laid down in BS 5514 of 1977.

k. Exhaust silencer

It is essential to keep the noise level as low as possible. An effective exhaust silencing system of the residential type is to be provided to limit the noise level to approximately 65/70/75dBA (select) @ 7 metres from the exhaust outlet or as specified in the detailed specification.

The exhaust pipe shall be installed in such a way that the expelled exhaust fumes will not cause discomfort to the public. The exhaust pipe must be flexibly connected to the engine to take up vibrations transmitted from the engine, which may cause breakage. The exhaust piping and silencer shall be lagged to reduce the heat and noise transmission into the plant room and shall be protected against the ingress of driving rain at  $45^\circ$  to the horizontal. The exhaust pipe must extend 0,5m above the roof gutters. It must be secured by flanges both sides of the wall at the point of exit. These flanges must be clamped to the wall with bolts through the wall.

C3.1.4.4 Alternator

a. General

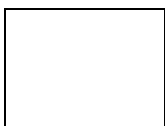
The alternator shall be of the self-excited brush less type, with enclosed ventilated drip proof housing and must be capable of supplying the specified output continuously with a temperature rise not exceeding the limits laid down in BS 5000 and SABS/ISO 8528 part 3 for rotor and stator windings.

The alternator shall be capable of delivering an output of 110% of the specified output, for one hour in any period of 12 hours consecutive running.

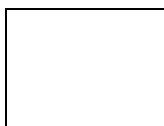
Both windings must be fully impregnated for tropical climate and must have an oil resisting finishing varnish.

b. Regulation

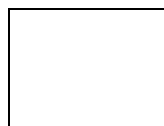
The steady state voltage regulation must not exceed  $\pm 1\%$  of nominal voltage specified between no load and full load with the power factor between unity and 0.8 lagging and within the driving speed variation of 4.5%.



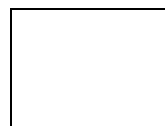
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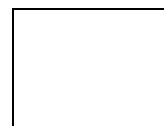
Witness 1



Witness 2



Employer



Witness 1



Witness 2

**c. Alternator protection**

On the switchboard a multi-pole circuit breaker with instantaneous short circuit trips and thermal overload trips must be installed for protection of the alternator against short circuit and overload.

**d. Performance**

The excitation system shall be designed to promote rapid voltage recovery following the sudden application of the load. The voltage shall recover to within 5% of the steady state within 300 milli-seconds following the application of full load and the transient voltage dip shall not exceed 18%.

**e. Coupling**

The engine and alternator must be directly coupled by means of a high quality flexible coupling. type.

**C3.1.4.5 Switchboard**

**a. General**

A switchboard must be supplied and installed to incorporate the equipment for the control and protection of the generating set and battery charging.

The switchboard must conform the specification as set out in the following paragraphs.

**b. Construction**

The switchboard shall be a totally enclosed, floor mounted unit, fabricated from steel panels, carried on and-substantial angle iron framework.

The board shall be flush fronted and all equipment to be mounted behind the front plate, on suitable supports.

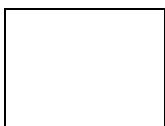
All equipment, connections and terminals shall be easily accessible from the front. The front panels may be either hinged or removable and fixed with studs and chromium-plated cap nuts. Self-tapping screws shall be used in the construction of the board.

All pushbuttons, pilot lights, control switches, instrument and control fuses, shall be mounted on hinged panels with the control wires in flexible looms.

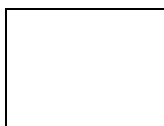
The steelwork of the boards must be thoroughly de-rusted, primed with zinc chromate and finished with two coats of signal red quality enamel, or a baked powder epoxy coating.

Suitably rated terminals must be provided for all main circuits and the control and protection circuits. Where cable lugs are used, these shall be crimped onto the cable strands. Screw terminals shall be of the type to prevent spreading of cable strands. All terminals shall be clearly marked.

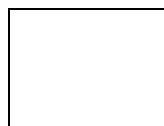
For the control wiring, each wire shall be fitted with a cable or wire marker of approved type, and numbering of these markers must be shown on the wiring diagram on the switchboard. Control wiring shall be run in PVC trunking. The trunking shall be properly fixed to the switchboard steelwork. Adhesives shall not be acceptable for the fixing of trunking or looms.



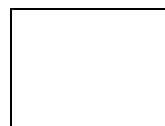
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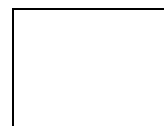
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The automatic control and protection control equipment shall be mounted on a separate easily replaceable small panel freely available in R.S.A. The automatic control shall be microprocessor based and shall be programmable, unless otherwise specified. The manufacturer shall guarantee the availability of compatible exchange control units for at least 10 years.

All equipment on the switchboard, such as contactors, isolators, bus bars, etc., shall have ample current carrying capacity to handle at least 110% of the alternator full load current.

**c. Mains failure control module (Auto change over)**

Control module must include the following minimum Protection functionality as listed below;

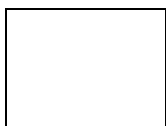
1. Over current protection
2. Unbalanced load protection
3. Independent earth fault protection

Control module must include the following minimum Indication functionality as listed below;

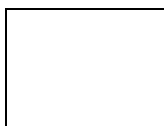
1. 4-Line back-lit LCD text display
2. Over current alarm display
3. High temperature alarm display
4. low Oil pressure alarm display
5. Low fuel alarm display
6. Battery charger faulty alarm display
7. Alternator not charging alarm display
8. Battery voltage low alarm display
9. Faulty switch position
10. Emergency stop alarm display

Control module must include the following minimum General functionality as listed below;

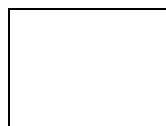
1. Fully functional front key pad programing
2. Fully configurable and commutation with PLC or scada via PC using USB, RS232, RS485 and Ethernet communication
3. Generator current and power monitoring (kW, kvar, kVA, pf)
4. Mains current and power monitoring (kW, kvar, kVA, pf)
5. 4 configurable DC outputs
6. 4 configurable analogue inputs
7. 4 configurable digital inputs
8. Two configurable volt-free relay outputs for remote monitoring of all fault indications.
9. Real time clock
10. Stop, start, and siren cancel buttons with auto manual selector
11. and siren cancel



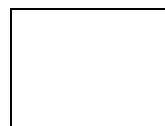
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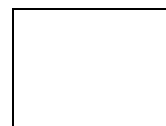
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**d. Circuit Breakers**

Circuit breaker requirements for main and changeover circuit breakers Breakers must be rated with a safety factor of 25% of maximum load current

A circuit breaker and an adjustable current limiting protection relay must be installed for protection of the alternator.

**e. Manual starting and operator selection**

Each switchboard shall be equipped with two pushbuttons marked "START" and "STOP" for manual starting and stopping of the set.

**f. Battery starting and charging equipment**

Each switchboard shall be equipped with battery charging equipment.

The charger shall be constant voltage, current limiting, operate automatically in accordance with the state of the battery and be capable of a continuous RMS current of at least 6 amps with an AC ripple content of less than 1% in order to prolong the life of the battery.

A flush mounted ammeter, suitably scaled, reading the charging current and a flush mounted voltmeter indicating the battery voltage must be provided on the switchboard. An engine driven alternator must be provided for charging the battery during operation of the set.

The charger must be fed from the mains. An engine driven alternator must be also a provided for charging the battery while the set is operational. Failure of this alternator must also activate the battery charger failure circuit.

**g. Switchboard equipment and instruments requirements**

Each generating set shall have a switchboard equipped as follows:

- One flush 96 mm square dial voltmeter, scaled, reading the alternator voltage.
- One flush voltmeter selector switch with 6 metering and one off position, connecting the voltmeter to phase and neutral and phase to phase.
- One flush 96mm square dial indicating type frequency meter, indicating the alternator frequency.
- An hour meter with cyclometer counter, reading the number of hours the plant has been operating. The smallest figure on this meter is to read 10/1 the hour.
- One set of fuses or CB's for potential circuits of the meters.
- Flush 96mm square dial maximum demand ammeters for measuring the alternator current, scaled to suit complete with necessary current transformer with resettable pointer.
- One isolator for the mains isolation (check detailed specification for requirement).



Contractor



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- Automatic – change over control equipment. (Check detailed specification for requirements).
- One circuit breaker for alternator protection against overload and short circuit conditions (check detailed specification for requirement).
- One four-position operation selector switch.
- Two push buttons or one key switch marked “START” and “STOP” for manual starting and stopping the set.
- Battery charging equipment as specified, complete with flush ammeter and voltmeter.
- Relays with re-set push button as specified, for engine protection and warning.
- Fault indicating lights.
- Mains fail simulation key switch.
- Switch for fuel pump.
- Warning hooter.
- By pass switch.
- Test pushbutton to test all indicator lamps.
- Suitable terminals for incoming main and alternator cables, for the outgoing feeder and for the earth connection.
- Any other equipment necessary for the correct and safe operation of the installation.

**h. Earthing**

An earth bar must be fitted in the switchboard, to which all non-current carrying metal parts shall be bonded.

The neutral point of the alternator must be solidly connected this bar by means of a removable link labelled “EARTH”. Suitable terminals must be provided on the earth bar for connection of up to three earth conductors, which will be supplied and installed by others.

**i. Operation selector switch**

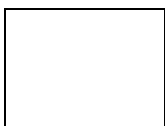
A four-position selector switch must be provided on the control panel marked “AUTO”, “MANUAL”, “TEST” and “OFF”.

With the selector on “AUTO” the set shall automatically start and stop according to mains supply being available or not.

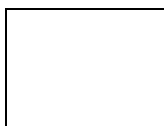
With the selector on “TEST” it shall be possible to start and stop the set with the push buttons but the running set shall not be switched to the load, UNLESS the mains supply fails during this test, in which case the set will be switched to the load.

With the selector on “MANUAL” the set must take load when started with the push button but it must not be possible to switch the set onto the mains or the mains onto the running set.

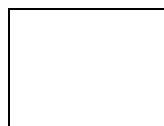
With the selector on “OFF” the set shall be completely disconnected from automatic controls for cleaning and maintenance of the engine.



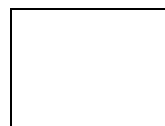
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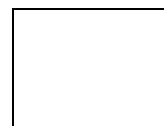
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j. Automatic change-over system

A fully automatic change-over system must be provided to isolate the mains supply and connect the standby set to the outgoing feeder in case of a mains failure and reverse this procedure on return of the mains.

k. By-pass switch and main isolator

The switchboard shall be equipped with an on-load isolator to isolate the mains and a manually operated on-load by-pass switch, which shall either connect the incoming mains to the automatic control gear or directly to the outgoing feeder. In the latter position the automatic control gear, including the main contractors, shall be isolated for maintenance purposes. It shall not be possible to start the engine except with the selector switch in the "TEST" position.

It is required that this by-pass switch and mains isolator be mounted away from the automatic control gear, in a separate compartment either on the side or in the lower portion of the switchboard cubicle, and that the switches operated from the front of the compartment.

l. Start Delay

Starting shall be automatic in event of a mains failure. A 0-15 second adjustable start delay timer shall be provided to prevent start-up on power trips or very short interruptions.

a. Stop delay

A stop delay with timer is required for the set, to keep the set on load for an adjustable period of one to sixty seconds after the return of the mains supply, before changing back to the supply. An additional timer shall keep the set running for a further adjustable cooling period of 5 to 10 minutes at no-load before stopping.

b. Mains fail simulation key switch

A main supply failure simulation key switch with "TEST" and "NORMAL" positions must be installed in the switchboard. In the "TEST" position, the set must be operated as if mains had failed, i.e. start and take load.

c. Coupling

The engine and alternator must be directly coupled by means of a high quality flexible coupling for double bearing alternators or a flexible plate supplied by the alternator manufacturer in the case of single bearing alternators.

d. Ethernet controller

Is required to handle all the data that is exchanged between the Generator and the server via LAN.

e. Earth protection

The operation of the generator may be easily affected by faults within the machine itself as by external disturbances occurring on the network to which it is connected. The generator protection must therefore be designed to react efficiently in both conditions.



Contractor



Witness 1



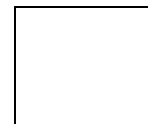
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Witness 2



f. GSM modem

A GSM modem is a specialized type of modem which accepts a SIM card, and operates over a subscription to a mobile operator, just like a mobile phone, this will assist in communicating with the instrumentation specialists and supervisor in case of error occurring with the generator. The modem should simultaneously alert at least three subscribed mobile numbers (these will be provided) should there be an alarm or trip issued from the Generator

C3.1.4.6 Installation

The tenderer must include for the complete installation and wiring of the plant in running order, including the cables from the Generator to the automatic change over control panel, connection of the incoming cable and outgoing feeder cables. This will also include the supply of the incoming mains cable and the plinth

The connecting of the cable and control cabling to the generator and the control terminals in the LV board remains the responsibility of the tenderer.

C3.1.4.7 Warning Notices

Notices, in two official languages, must be installed in the plant rooms. The contents of these notices are summarised below;

- (a) Unauthorised entry prohibited.
- (b) Unauthorised handling of equipment prohibited.
- (c) Procedure in case of electric shock.
- (d) Procedure in case of fire.

The successful tenderer must consult the Occupational Health and Safety Act 83 of 1993 and get approval of the wording from the Department's representative, prior to ordering the notices.

Lettering must be black on a yellow background.

Notices (a) must be installed outside next to the entrance of the plant room and (b-d) inside the plant room.

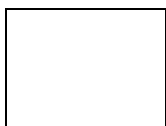
In the plant room, a clearly legible and indelible warning notice must be mounted in a conspicuous position.

The motive shall be made of a non-corrodible and non-deteriorating material, preferable plastic, and must read as follows:

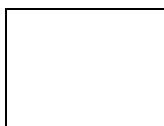
**\*DANGER: This engine will start without notice. Turn selector switch on control board to "OFF" before working on the plant.**

C3.1.4.8 Construction

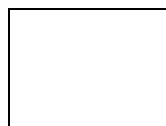
The engine and the alternator of the set shall be built together on a common base frame, of simplex/duplex type. For set mounted panels a Duplex frame will be preferred, consisting of a heavy duty inner frame on which the alternator and engine are secured with an outer floor standing frame between which purposes made anti-vibration mountings in "V" formation are mounted. The Panel will be mounted on the floor standing frame. The Simplex type base frame will consist of a heavy-duty steel frame on which the alternator and engine are



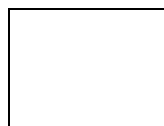
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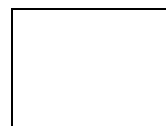
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secured fitted with floor standing spring type anti-vibration mountings. The set must be placed direct on the concrete floor. A drip tray must be fitted under the engine. The tray must be directly large enough to catch a drip from any part of the engine.

#### C3.1.4.9 Operation

The set is required to supply the lighting and power requirements in the case of a mains power failure.

The set shall be fully automatic i.e. it shall start when any one phase of the main supply fails or get switched and shall shut down when the normal supply is re-established. In addition it shall be possible to manually start and stop the set by means of pushbuttons on the switchboard.

The automatic control shall make provision for three consecutive starting attempts. Thereafter the set must be switched off, and the start failure relay on the switchboard must give a visible and audible indication of the fault.

To prevent the alternator being electrically connected to the mains supply when the mains supply is on and vice versa, a safe and fail proof system of suitably interlocked contactors shall be supplied and fitted to the changeover switchboard.

#### C3.1.4.10 Test Certificates and Inspections and Training

The following tests are to be carried out:

- i. At the supplier's premises, before the generator unit will be delivered to site Representatives from ERWAT must be present during the test to satisfy them that the generating set complies with the specification and delivers the specified output. The test must be carried out in accordance with BSS 5514, Part 2 and 3. ERWAT must be timeously advised of the date for the test.
- ii. The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing.
- iii. Test report of the test as specified under (a) is to be submitted to ERWAT

The following training is required:

- i. Operational training
- ii. Maintenance and repairs training



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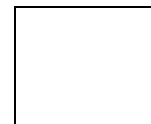
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### C3.1.5 Datasheet

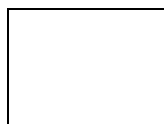
This is the minimum specifications ERWAT will consider: **Failure to complete the datasheet in full and submit manufactures datasheet/brochure that is linked to the minimum specifications will lead to disqualification. In the event that the information completed by the bidder below differs from the brochure submitted, the brochure will take precedence and will be used to verify compliance to the mandatory requirements.**

200 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
1.	Make(Engine)	-----	
2.	Model(Engine)	-----	
3.	Prime Power (kVA)	200 kVA	
4.	No. of Cylinders	6	
5.	Battery system	24V	
6.	Turbo	Yes	
7.	RPM(Engine)	1500	
8.	Compression Ratio	15.8 : 1	
9.	Frequency	50 Hz	

250 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
10.	Make(Engine)	-----	
11.	Model(Engine)	-----	
12.	Prime Power (kVA)	250 kVA	
13.	No. of Cylinders	6	
14.	Battery system	24V	
15.	Turbo	Yes	
16.	RPM(Engine)	1500	
17.	Compression Ratio	16 : 1	



Contractor



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Witness 2



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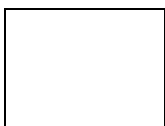


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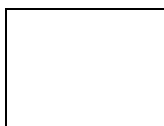
18.	Frequency	50 Hz	
19.	Fuel consumption (Full Load)	56 - 60 l/h	

300 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
20.	Make(Engine)	-----	
21.	Model(Engine)	-----	
22.	Prime Power (kVA)	300 kVA	
23.	No. of Cylinders	5	
24.	Battery system	24V	
25.	Turbo	Yes	
26.	RPM(Engine)	1500	
27.	Compression Ratio	16 : 1	
28.	Frequency	50 Hz	
29.	Fuel consumption (Full Load)	64 - 68 l/h	

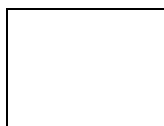
500 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
30.	Make(Engine)	-----	
31.	Model(Engine)	-----	
32.	Prime Power (kVA)	500 kVA	
33.	No. of Cylinders	6	
34.	Battery system	24V	
35.	Turbo	Yes	
36.	RPM(Engine)	1500	
37.	Compression Ratio	16.3 : 1	
38.	Frequency	50 Hz	



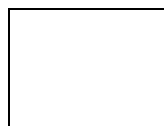
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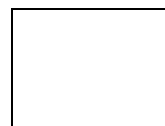
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39.	Fuel consumption (Full Load)	98 - 102 l/h	
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600 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
40.	Make(Engine)	-----	
41.	Model(Engine)	-----	
42.	Prime Power (kVA)	600 kVA	
43.	No. of Cylinders	90° V8	
44.	Battery system	24V	
45.	Turbo	Yes	
46.	RPM(Engine)	1500	
47.	Frequency	50 Hz	
48.	Fuel consumption (Full Load)	121 - 125 l/h	

650 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
49.	Make(Engine)	-----	
50.	Model(Engine)	-----	
51.	Prime Power (kVA)	650 kVA	
52.	No. of Cylinders	90° V8	
53.	Battery system	24V	
54.	Turbo	Yes	
55.	RPM(Engine)	1500	
56.	Frequency	50 Hz	
57.	Fuel consumption (Full Load)	131 - 135 l/h	

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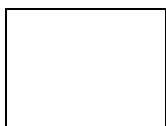
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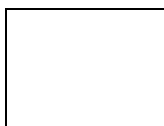
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800 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
58.	Make(Engine)	-----	
59.	Model(Engine)	-----	
60.	Prime Power (kVA)	800 kVA	
61.	No. of Cylinders	6	
62.	Battery system	24V	
63.	Turbo	Yes	
64.	RPM(Engine)	1500	
65.	Frequency	50 Hz	
66.	Compression ratio	12.8:1	

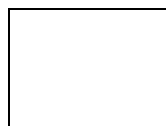
1000 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
67.	Make(Engine)	-----	
68.	Model(Engine)	-----	
69.	Prime Power (kVA)	1000 kVA	
70.	No. of Cylinders	8	
71.	Battery system	24V	
72.	Turbo	Yes	
73.	RPM(Engine)	1500	
74.	Frequency	50 Hz	
75.	Compression ratio	12.8:1	



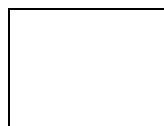
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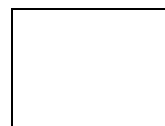
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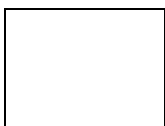
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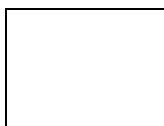
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1250 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
76.	Make(Engine)	-----	
77.	Model(Engine)	-----	
78.	Prime Power (kVA)	1250 kVA	
79.	No. of Cylinders	12	
80.	Battery system	24V	
81.	Turbo	Yes	
82.	RPM(Engine)	1500	
83.	Frequency	50 Hz	
84.	Compression ratio	13:1	

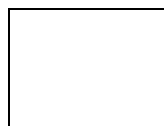
2000 KVA Prime Power (Engine)			
Items No	Description	Specified: Engineer	Offered: Supplier
85.	Make(Engine)	-----	
86.	Model(Engine)	-----	
87.	Prime Power (kVA)	2000 kVA	
88.	No. of Cylinders	16	
89.	Battery system	24V	
90.	Turbo	Yes	
91.	RPM(Engine)	1500	
92.	Frequency	50 Hz	
93.	Compression ratio	13.6:1	



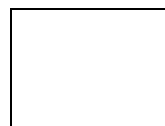
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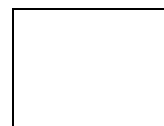
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**C3.1.6 SITE INFORMATION**

ITEM	REGION/SITE	Physical Address	COORDINATES
A.	<b><u>DD3 Region Equipment</u></b>		
1.	Olifantsfontein WCW	Keramiek Road, Olifantsfontein	25°56'24.48" S, 28°12'57.96" E
2.	Hartebeestfontein WCW	R25 (Bapsfontein/Hartebeestfontein)	26°01'11.58" S, 28°17'04.80" E
3.	Benoni WCW	6 Lancaster Road, Actonville, Benoni	26°12'30.19" S, 28°19'00.48" E
4.	Esther Park WCW	Parkland Drive, Esther Park, Kempton Par	26°06'02.43" S, 28°10'57.80" E
5.	Rynfield WCW	69 Sarel Cilliers Street, Rynfield, Benon	26°09'31.05" S, 28°21'21.41" E
B.	<b><u>DD4 Region Equipment</u></b>		
6.	JP Marais WCW	Corner of N12/Kingsway Road, Benoni	26°10'13.46" S, 28°23'49.21" E
7.	Welgedacht WCW	1 Carnation Road, Welgedacht Agricultural Holdings, Springs	26°11'29.18" S, 28°28'26.86" E
8.	Ancor WCW	Ermelo Road, Strubenvale, Springs	26°16'08.45" S, 28°29'00.15" E
9.	Daveyton WCW	Plot 4, Holfontein Road, Etawa Ext 1, Benoni	26°08'08.72" S, 28°27'49.20" E
10.	Jan Smuts WCW	Corner Escombe and Wanderers Street, Brakpan	26°13'24.45" S, 28°22'33.01" E
C.	<b><u>DD5 Region equipment</u></b>		
11.	Heidelberg WCW	Farm Bosch Hoek 385, Vaaldam Road, Heidelberg	26°32'22.98" S, 28°19'52.36" E
12.	Ratanda WCW	Farm Klipstapel, Vaaldam Road, Ratanda	26°34'58.82" S, 28°18'10.64" E
13.	Carl Grundlingh WCW	Vorsterkroon, Nigel	26°23'17.69" S, 28°28'28.00" E
14.	Herbert Bickley WCW	Heidelberg Road, Plot 14, Maraisdrift, Nigel	26°26'40.37" S, 28°26'46.89" E
15.	Tsakane WCW	Corner Modjadji and Khama Street, Tsakane, Brakpan	26°22'31.93" S, 28°21'58.20" E
D.	<b><u>DD6 Region equipment</u></b>		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



16.	Dekema WCW	536 Sontonga Street, Motsamai Section, Katlehong	26°20'39.40" S, 28°10'01.31" E
17.	Waterval WCW	1 Eike Road, Klip River	26°26'14.12" S, 28°06'03.55" E
18.	Vlakplaats WCW	Corner Brickfield/Bierman Streets, Vosloorus	26°20'47.85" S, 28°10'55.11" E
19.	Rondebult WCW	Corner Kalk/Van Dyk Roads, Rondebult	26°17'57.92" S, 28°13'37.82" E

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

C3.1.6.1 *Services and Facilities provided by the Employer.*

**1. Electricity Supply**

The Site is provided with ESKOM/Municipality power. One or more 380 V 50 Hz power supply points can be made available to the Contractor. 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.

**2. Telephone Services**

To be provided by Contractor

**3. 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 where applicable.

C3.1.6.2 *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.

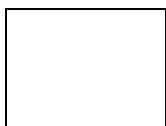
C3.1.7 *Site Usage*

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.

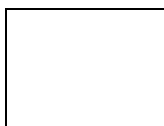
**C3.2 MANAGEMENT OF THE WORKS**

C3.2.1 *Planning and Programming*

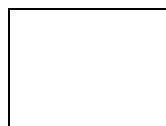
The programme referred to in the General Conditions of Contract shall be a network- based programme in accordance with the precedence method; a detailed cash flow graph indicating projected monthly invoice amounts shall also be provided. The critical path of the programme of work shall be clearly indicated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



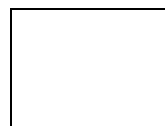
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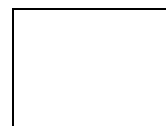
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Witness 2



Employer

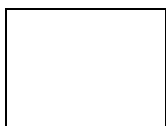


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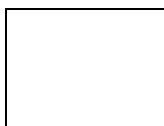


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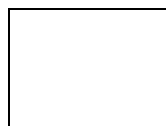
- (1) In compiling the programme of work, the Contractor shall incorporate the following important specific requirements and constraints:
- (a) The identification and marking of affected services prior to commencing construction works.
  - (b) The requirements of the Environmental Management Plan (EMP) 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, 2003.
  - (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.



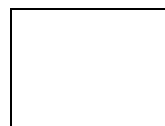
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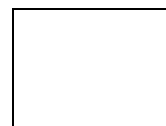
Witness 1



Witness 2



Employer



Witness 1



Witness 2

**APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR  
ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY  
SIX (36 NO.) MONTHS**

**3.4 HEALTH AND SAFETY SPECIFICATIONS**

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**C3.4.1.2 Purpose of the construction Health and Safety Specification**

**C3.4.2 HEALTH AND SAFETY SPECIFICATION**

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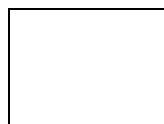
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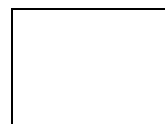
Witness 1



Witness 2



Employer



Witness 1



Witness 2

- C3.4.2.4.3 Confined Spaces
- C3.4.2.4.4 Existing Structures
- C3.4.2.4.5 Edge Protection and Penetrations
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  - C3.4.2.5.10 Public Health and Safety
  - C3.4.2.5.11 Night Work
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  - C3.4.2.6.2 Welfare Facilities
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- C3.4.4 ANNEXURE B PC RESPONSIBLE PERSON(S)**
- C3.4.5 ANNEXURE C OTHER REQUIREMENTS**
- C3.4.6 ANNEXURE D ACKNOWLEDGEMENT OF H & S SPECS**

### **C3.4.1 INTRODUCTION AND BACKGROUND**

#### **C3.5.1.1 BACKGROUND TO THE HEALTH AND SAFETY SPECIFICATION**

The Construction Regulations (July 2003) 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.

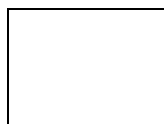
#### **C3.6.1.2 PURPOSE OF THE HEALTH AND SAFETY SPECIFICATION**

To assist in achieving compliance with the Occupational Health and Safety Act 85/1993 and the promulgated Construction Regulations (July 2003) 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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

## **C3.6.2 HEALTH AND SAFETY SPECIFICATION**

### **C3.4.2.1 SCOPE**

This specification covers the requirements for eliminating and mitigating incidents and injuries on the **APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS Project.**

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.

#### **C3.4.2.1.2 Provision for Health & Safety Cost**

The Principal Contractor must make provision for the cost of Health & Safety Measures during the construction process as required by the Construction Regulation 4(h).

### **C3.4.2.2 INTERPRETATIONS**

#### **C3.4.2.2.1 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.

#### **C3.4.2.2.2 DEFINITIONS**

The definitions as listed in the Occupational Health and Safety Act 85/1993 and Construction Regulations (July 2003) shall apply.

### **C3.4.2.3 MINIMUM ADMINISTRATIVE REQUIREMENTS**

#### **C3.4.2.3.1 NOTIFICATION OF INTENTION TO COMMENCE CONSTRUCTION WORK**

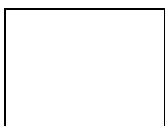
The Principal Contractor shall notify the provincial Director of the Department of Labour in writing that construction work commences.

#### **C3.4.2.3.2 ASSIGNMENT OF CONTRACTOR'S RESPONSIBLE PERSONS TO SUPERVISE HEALTH AND SAFETY ON SITE**

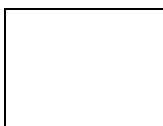
The Principal Contractor shall submit supervisory appointments as well as any relevant Appointments in writing (as stipulated by the OHSA and Construction Regulations), prior to commencement of work. Proof of competency must be included. See annexure B.

#### **C3.4.2.3.3 COMPETENCY FOR CONTRACTOR'S APPOINTED COMPETENT PERSON**

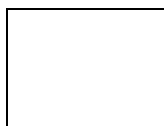
The Principal Contractors' competent persons for the various risk management portfolios shall fulfil the criteria as stipulated under the definition of Competent in accordance with the



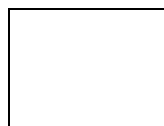
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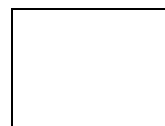
Witness 1



Witness 2



Employer



Witness 1



Witness 2

Construction Regulations (July 2003). Proof of competence for the various appointments must be included.

#### **C3.4.2.3.4 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.

#### **C3.4.2.3.5 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.

#### **C3.4.2.3.6 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.

#### **C3.4.2.3.7 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



Contractor



Witness 1



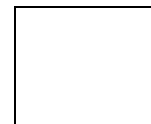
Witness 2



Employer



Witness 1



Witness 2

- 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 7(4)

#### **C3.4.2.3.8 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.

#### **C3.4.2.3.9 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.

#### **C3.4.2.3.10 HEALTH AND SAFETY TRAINING**

##### **C3.4.2.3.10.1 Induction**

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

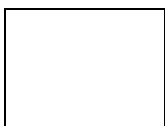
##### **C3.4.2.3.10.2 Awareness**

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.

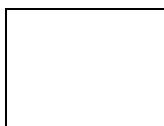
##### **C3.4.2.3.10.3 Competency**

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.

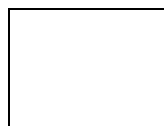
Periodic audits by the Client's Health & Safety Agent, progress meetings, etc. The Contractor is responsible to ensure that competent Contractors are appointed to carry out construction work.



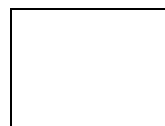
Contractor



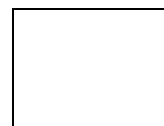
Witness 1



Witness 2



Employer



Witness 1



Witness 2



#### C3.4.2.3.11 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 (July 2003). 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 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.

#### C3.4.2.3.12 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.

#### C3.4.2.3.13 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.

#### C3.4.2.3.14 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.

#### C3.4.2.3.15 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.

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

**All incidents reportable in terms of the provision of Section 24 of the OHS Act 1993 must be reported to the local Dept. of Labour 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.

#### **C3.4.2.3.16 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.

#### **C3.4.2.3.17 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.

#### **C3.4.2.3.18 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.

#### **C3.4.2.3.19 CONTRACTORS**

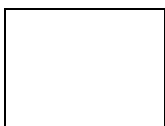
The Principal Contractor shall ensure that all Contractors appointed by them comply with this Specification, the OHS Act 85/1993, and Construction Regulation (July 2003).

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.

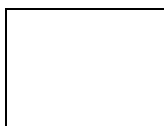
The Principal Contractor must stop any Contractor from carrying out construction work that is not in accordance with the Principal Contractor's or Contractor's health & safety plan or if there is an immediate threat to the health and safety of persons.

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;

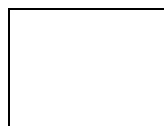
The Principal Contractor must ensure that their Contractor is registered and in good standing



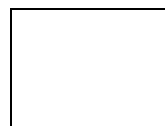
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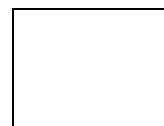
Witness 1



Witness 2



Employer



Witness 1



Witness 2

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;

#### **C3.4.2.3.20 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.**

#### **C3.4.2.3.21 A HEALTH AND SAFETY OFFICER CR 6.6**

**The Principal Contractor shall provide a full-time safety officer on site and proof of their competency to be attached to their appointment.**

#### **C3.4.2.4 PHYSICAL REQUIREMENTS**

##### **C3.4.2.4.1 CIVIL WORK**

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

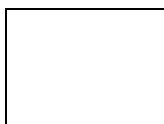
- A competent site supervisor to be on site at all times.
- Plant and equipment inspected daily and registers kept.
- All operators of plant and vehicles: trained, competent and physically and psychologically fit. Certificates to be put in their Health & Safety File.
- Workers that are working close 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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- 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.

#### **C3.4.2.4.2 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 section 11 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.

#### **C3.4.2.4.3 CONFINED SPACE ENTRY**

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

#### **C3.4.2.4.4 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.

#### **C3.4.2.4.5 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.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

#### **C3.4.2.4.6 HAZARDOUS CHEMICAL SUBSTANCES (HCS)**

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

#### **C3.4.2.4.7 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.

#### **C3.4.2.5 PLANT AND MACHINERY**

##### **C3.4.2.5.1 CONSTRUCTION PLANT**

The Principal Contractor shall ensure that all such plant complies with the Requirements of the OHS Act 85/1993 and Construction Regulations (July 2003). 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.

##### **C3.4.2.5.2 VESSELS UNDER PRESSURE (VUP) AND GAS BOTTLES**

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

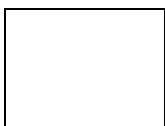
Providing competency and awareness training to the operators, Providing PPE, Inspect Equipment regularly and keep record of inspections, Provide appropriate firefighting equipment (Fire Extinguishers) on hand.

##### **C3.4.2.5.3 FIRE EXTINGUISHERS AND FIRE FIGHTING EQUIPMENT**

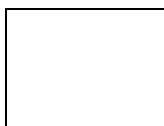
The Principal Contractor shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted as required.

##### **C3.4.2.5.4 HIRED PLANT AND MACHINERY**

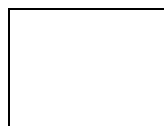
The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use. The necessary requirements as stipulated by the OHS Act 85/1993 and Construction Regulations (July 2003) shall apply. The Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the Health and Safety file. All relevant Contractors must ensure the same.



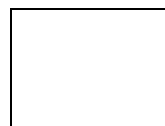
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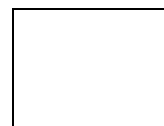
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Witness 2



Employer



Witness 1



Witness 2

### C3.4.2.5.5 FORMWORK AND SUPPORT WORK FOR STRUCTURES

The Principal Contractor shall ensure that the provisions of section 10 of Construction Regulations (July 2003) 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.

### C3.4.2.5.6 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.

### C3.4.2.5.7 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 22.**

All temporary electrical installations must be inspected at least weekly.

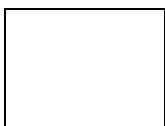
### C3.4.2.5.8 PORTABLE ELECTRICAL TOOLS AND EXPLOSIVE POWERED TOOLS

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

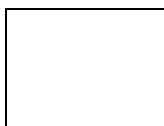
The Contractor shall ensure that all electrical tools, electrical distribution boards, extension leads, and plugs are kept in safe working order. Regular inspections and toolbox talks must be conducted to make workers aware of the dangers and the control measures that are to be implemented e.g. Personal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

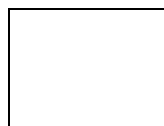
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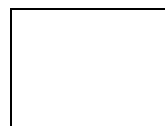
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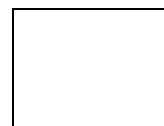
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Witness 2



Employer



Witness 1



Witness 2

#### C3.4.2.5.9 WELDING EQUIPMENT

- Only authorised / 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.

#### C3.4.2.5.10 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.

#### C3.4.2.5.11 NIGHT WORK

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

#### C3.4.2.6 OCCUPATIONAL HEALTH

##### C3.4.2.6.1 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:

##### Ventilation

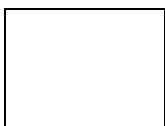
Adequate ventilation / extraction / exhausting in hazardous areas e.g. chemicals / adhesives / welding / petrol or diesel/ motors running and in confined spaces / basements.

##### Noise

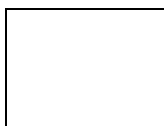
Tasks identified where noise exceeds 85 dBa. All reasonable steps are to be taken to reduce noise levels. Hearing protection is to be used where noise levels cannot be reduced to below 85 dBa.

##### Dust

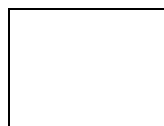
Principal Contractor to ensure that employees working with grinders, saws & jackhammers, etc. are issued with dust masks and dust exposure to be minimized at all times.



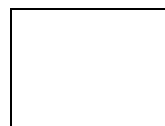
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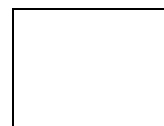
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Employer



Witness 1



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#### **C3.4.2.6.2 WELFARE FACILITIES**

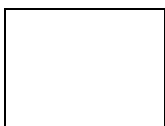
The Principal Contractor will provide ablution facilities for all on site, including changing facilities & hand washing facilities. Safe and adequate facilities will be provided. Waste bins must be strategically placed and emptied regularly. Safe and clean storage areas must be provided for workers to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

#### **C3.4.2.6.3 ALCOHOL AND OTHER DRUGS**

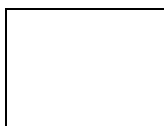
The Principal Contractor is to ensure that no alcohol and other drugs are allowed on site. No person may be under the influence of alcohol or any other drugs while on the construction site. Any person on prescription drugs must inform his/her superior, who shall in turn report this to the Contractor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

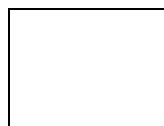
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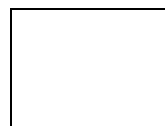
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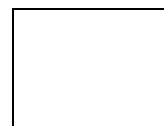
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**HEALTH AND SAFETY SPECIFICATIONS (HSS)**

**PROJECT: APPOINTMENT OF SERVICE PROVIDER/S TO  
SUPPLY, DELIVER AND INSTALL GENERATORS FOR  
ERWAT WATER CARE WORKS ON 'AS AND WHEN  
REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.)  
MONTHS**

Annexure A

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

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

Contractor

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Employer

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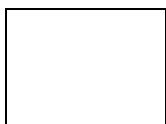
**HEALTH AND SAFETY SPECIFICATIONS (HSS)**

**PROJECT: APPOINTMENT OF SERVICE PROVIDER/S TO  
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MONTHS**

**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	OHS REFERENCE	REQUIREMENT
CEO Assignee	Section 16(2)	A competent person to assume the overall H & S responsibility - Contractor's Responsible Person
Construction Work Supervisor	CR 6.1	A competent person to supervise and be responsible for Health and Safety related issues on site
Subordinate Construction Work Supervisors	CR 6.2	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 assist with identifying risks, attend H & S meetings, conduct inspections, assist with investigations, etc.
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 7	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 8	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-	A competent person to erect scaffolding



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

APPOINTMENT	OHS REFERENCE	REQUIREMENT
	1:2004	
Scaffolding Supervisor	SANS 10085-1:2004	A competent person to supervise scaffolding
Stacking Supervisor	CR 26	A competent person to supervise all stacking and storage operations
Explosive powered tools Inspector / Supervisor	CR 19	A competent person to inspect and clean the tools daily and controlling all operations thereof
Temporary electrical installations Supervisor	CR 22	A competent person to control all temporary electrical installations
Fire-fighting equipment Inspector	CR 27	A competent person to inspect fire-fighting equipment

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*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

## OTHER REQUIREMENTS

### PROJECT APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A PERIOD OF THIRTY SIX (36 NO.) MONTHS

#### 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 (Tool Box 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	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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	

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**PROJECT: APPOINTMENT OF SERVICE PROVIDER/S TO SUPPLY, DELIVER AND INSTALL  
GENERATORS FOR ERWAT WATER CARE WORKS ON 'AS AND WHEN REQUIRED' BASIS FOR A  
PERIOD OF THIRTY SIX (36 NO.) MONTHS P**

**Annexure D**

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:



Contractor



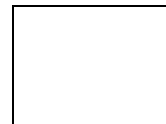
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Employer



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### **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.

Contractor

Witness 1

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Employer

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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.

Contractor

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Employer

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#### **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 authorisation 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 minimise 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.

Contractor

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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.

Contractor

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#### **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 minimise 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 minimises the impact on vegetation and animals inside or outside of the Works area.

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### **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 minimised 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

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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 minimise erosion by wind or runoff.

#### **C3.6.6.2 Stockpiling of topsoil**

Topsoil should be temporarily stockpiled, separately from (clay) subsoil and rocky material, when areas are cleared. 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.

Contractor

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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 top soil 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.

Where topsoil that has been stripped by the Contractor is insufficient to provide the 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

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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 organisation 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 minimise 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 minimise 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.

Contractor

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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 neighboring 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 minimise, 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 washwater 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.

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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 minimise 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 minimising

- 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

Contractor

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- 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 minimise 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.

Contractor

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Employer

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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. Neighboring 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 kilometers 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.

Contractor

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Employer

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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 minimise adverse impacts on private vehicular traffic. Temporary access

Contractor

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Employer

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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.

Contractor

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Employer

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Witness 2

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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**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.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2