

**BID ERW2211/02: THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS**

<b>COMPULSORY BRIEFING SESSION</b>  Kindly register to attend the virtual meeting		<b>24 MARCH 2023 @ 10H00</b>  Zoom link: <a href="https://erwat-za.zoom.us/join/9tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-">https://erwat-za.zoom.us/join/9tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-</a>
<b>CLOSING DATE:</b>		<b>19 APRIL 2023 @ 12H00</b>
<b>FULL NAME OF BIDDER</b>		
<b>CONTACT PERSON</b>		
<b>TEL NUMBER</b>		
<b>FAX NUMBER</b>		
<b>E-MAIL ADDRESS</b>		
<b>CENTRAL SUPPLIER DATABASE REG. NO</b>		M_____
<b>BIDDERS OFFER</b>  <i>(Kindly note that this price is not considered the total contract value)</i>	<b><u>R ALL TENDERED RATES</u></b>	<b>INCL VAT</b>

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Witness 2



PROJECT NO: ERW2211/02

**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS,  
TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER  
INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A  
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C1.2 Contract Data.

C1.3 Form of Guarantee.

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C1.5 Corporate Governance Breach Clause.

**Part C2: Pricing Data**

C2.1 Pricing Instructions.

C2.2 Bill of Quantities.

**Part C3: Scope of Work**

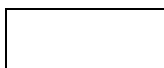
C3 Scope of Works.

**Part C4: Site Information**

C4 Site Information.



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2



PROJECT NO: ERW2211/02

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**T 1.1 BID NOTICE: ADVERTISEMENT**

PROJECT NO.	PROJECT DESCRIPTION	CONTACT PERSON	COMPULSORY BRIEFING SESSION DATE	CLOSING DATE & TIME	TENDER COST
ERW2211/ 02	THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS	JEFFREY MATHUNZI 011 929 7000	24 MARCH 2023 @ 10H00  VIA VIRTUAL ZOOM MEETING  <u>NOTE</u> Registration will be required.	19 APRIL 2023 @ 12H00.	R 250-00
Briefing Session Zoom link: <a href="https://erwat-za.zoom.us/join/9tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-">https://erwat-za.zoom.us/join/9tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-</a>					

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.

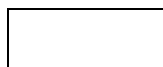
Complete Tenders in ink and clearly marked **“CONTRACT: ERW2211/02: THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS”** and must be placed in the correct Tender Box situated at ERWAT Head Office, Hartebeestfontein Office Park, R25 (Bapsfontein/ Bronkhorstspuit), Kempton Park, not later than **12h00, 19 April 2023** 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.

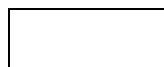
All SCM Enquiries shall be addressed to Brenda Matlala at [brenda.matlala@erwat.co.za](mailto:brenda.matlala@erwat.co.za) and All Technical Enquiries shall be addressed to Jeffrey Mathunzi at [Jeffrey.Mathunzi@erwat.co.za](mailto:Jeffrey.Mathunzi@erwat.co.za)

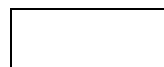
Bids will be evaluated in terms of ERWAT' Supply Chain Management Policy 200, the MFMA SCM Regulations, the Preferential Procurement Policy Framework Act and its Regulations, 2022, the General Conditions of Contract for construction (GCC) and, if applicable, any other special conditions of contract.

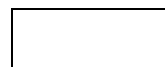
*“The Special Conditions of Contract are supplementary to that of the General Conditions of Contract. In the event of any contradiction between the GCC or any other applicable contractual agreement, the Municipal Financial Management Act and its applicable regulations will take precedence.”*

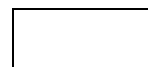
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

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

ERWAT accepts no responsibility for bidders accessing the tender notices from other sites/sources other than the newspapers used, its website ([www.erwat.co.za/procurement](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 2022 (date of advert is available on the website and advertised)**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



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**T 1.2 TENDER DATA**

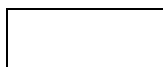
**General**

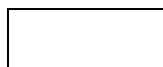
The conditions of tender are the Standard Conditions of Tender as contained in Annex F of Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. See [www.cidb.org.za](http://www.cidb.org.za)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

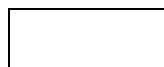
The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard Conditions of Tender. Each item of data given below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

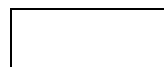
**The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender.**

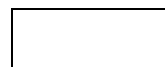
Clause No.	Tender Data
F.1.1	<b>The Employer is:</b> East Rand Water Care Company (ERWAT) Hartebeestfontein Office Park R25 (Bapsfontein/Bronkhorstspuit Road) Kempton Park
F.1.2	<b>The tender documents issued by the employer comprise:</b>  <b>SECTION 1: THE TENDER</b> <b>Part T1: Tender Procedures</b> T1.1 Tender notice and invitation to Tender. T1.2 Tender Data  <b>Part T2: Returnable Documents</b> T2.1 List of returnable documents T2.2 Returnable schedules

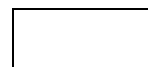
  
Contractor

  
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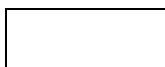
  
Witness 2

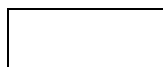
  
Employer

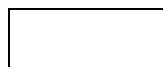
  
Witness 1

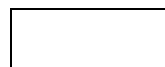
  
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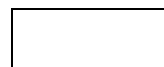
Clause No.	Tender Data
	<p><b>SECTION 2 – THE CONTRACT</b></p> <p><b>Part C1: Agreements and Contract Data</b>  C1.1 Form of Offer and Acceptance  C1.2 Contract Data</p> <p><b>Part C2: Pricing Data</b>  C2.1 Pricing Instructions  C2.2 Bill of Quantities</p> <p><b>Part C3: Scope of Work</b>  C3.1 Description of Works  C3.2 Engineering</p> <p><b>Part C4: Site Information</b>  C4 Site Information</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 Employers representatives are:</b></p> <p>SCM: Ms Phumzile Mdlalose  Telephone: 011 929-7000  E-mail Address: <a href="mailto:publictenders@erwat.co.za">publictenders@erwat.co.za</a></p> <p>Technical: Mr Jeffrey Mathunzi  Telephone: 011 929 7000  E-mail Address: <a href="mailto:Jeffrey.mathunzi@erwat.co.za">Jeffrey.mathunzi@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 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>
<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>

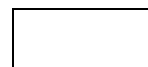
  
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Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

Clause No.	Tender Data								
<b>F. 1.6</b>	<p>The lowest bidder or any bid will not necessarily be accepted. It is the intention of ERWAT to appoint more than one bidder for this bid, and a maximum of the numbers that are stipulated for each discipline under the table given below. The evaluation of bids and point scoring will be done per individual Disciplines.</p> <table border="1"> <thead> <tr> <th>DISCIPLINES</th><th>NUMBER OF ENGINEERING CONSULTANTS</th></tr> </thead> <tbody> <tr> <td> <b>Wastewater Infrastructure</b>  [sewer pipelines, pump stations, concrete structures, plant upgrades, condition assessments, wastewater process units] </td><td>8</td></tr> <tr> <td> <b>Roads and Stormwater Management</b>  [paved roads, stormwater management designs, surveys, cadastral and servitudes] </td><td>8</td></tr> <tr> <td> <b>Building works</b>  [office buildings, laboratory buildings] </td><td>8</td></tr> </tbody> </table> <p><b>NB: Bidders shall indicate their tendered disciplines under Form M</b></p>	DISCIPLINES	NUMBER OF ENGINEERING CONSULTANTS	<b>Wastewater Infrastructure</b> [sewer pipelines, pump stations, concrete structures, plant upgrades, condition assessments, wastewater process units]	8	<b>Roads and Stormwater Management</b> [paved roads, stormwater management designs, surveys, cadastral and servitudes]	8	<b>Building works</b> [office buildings, laboratory buildings]	8
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<b>F.2.1</b>	<p><b>MINIMUM REQUIREMENTS</b></p> <p>The professional service provider shall be expected to comply with the minimum requirements stipulated for each respective discipline listed below to be considered eligible for this tender. Only those tenderers who satisfy the eligibility criteria are eligible to submit tenders. Failure to comply with the minimum requirements will result in disqualification</p> <p><b>1. WASTEWATER INFRASTRUCTURE</b></p> <table border="1"> <thead> <tr> <th>EVALUATION ASPECT</th><th>MINIMUM REQUIREMENT</th></tr> </thead> <tbody> <tr> <td><b>Staffing profile</b></td><td> <p><b>1 x Professional Structural Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BSC/ BEng)</li> <li>Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Structural Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/ BSC/ BEng)</li> <li>Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> </ul> </td></tr> </tbody> </table>	EVALUATION ASPECT	MINIMUM REQUIREMENT	<b>Staffing profile</b>	<p><b>1 x Professional Structural Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BSC/ BEng)</li> <li>Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Structural Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/ BSC/ BEng)</li> <li>Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> </ul>				
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Contractor

Witness 1

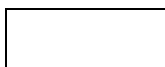
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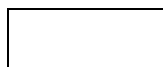
Employer

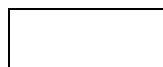
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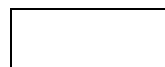
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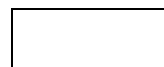
Clause No.	Tender Data		
		<ul style="list-style-type: none"> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Structural Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures related projects.</li> </ul> <p><b>1 x Professional Geotechnical Engineer or Geologist.</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering/Geotechnical engineering (BSC/BEng) or Geology</li> <li>Minimum of 10 years' experience in the geotechnical designs of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or liquid retaining structural projects, with more than 5 years' geotechnical design experience.</li> <li>Professional registration with ECSA or SACNASP for at least five (5) years.</li> </ul> <p><b>1 x Professional Hydraulics Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Hydraulics Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Hydraulics Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the Hydraulic design of Bulk sewer pipes and Wastewater Treatment or Water Treatment works.</li> </ul> <p><b>1x Professional Process Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1x Professional Process Technologist/Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> </ul>	

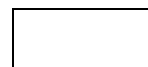
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2



Clause No.	Tender Data		
		<ul style="list-style-type: none"> <li>Minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Process Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> </ul> <p><b>1 x Professional Mechanical Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Mechanical Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Mechanical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure or similar industrial Mechanical Infrastructure.</li> </ul> <p><b>1 x Professional Electrical Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation Electrical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Electrical Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation Electrical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Clause No.	Tender Data	
		<p><b>1x Professional Control and Instrumentation Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical/Electronic Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1x Professional Control and Instrumentation Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical/Electronic Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Construction Project Manager</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 10 years' experience in Management and Administration of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure Projects.</li> <li>Professional registration with SACPCMP or PMP for at least five (5) years.</li> </ul>
	<b>Previous relevant company experience</b>	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction (ECSA Stages 1 to 6) of Wastewater Treatment or Water Treatment or Bulk Water or Wastewater retaining infrastructure for a minimum total of R 25 million per project (Total project value).
	<b>Financial ability to execute the contract. (three years (3) financial statements)</b>	A Minimum Turn-Over of R 10 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).
	<b>Company Registration</b>	Company registered and in Operation for four (4) years, with a minimum turn-over of R 5 000 000 for the latest three (3) consecutive financial years.
	<p><b><u>REQUIRED DOCUMENTS:</u></b></p> <p><b>Bidders are required submitting the following documents with their bids:</b></p> <p><b>1xProfessional Structural Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)</li> </ul>	

Contractor

Witness 1

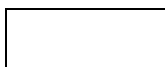
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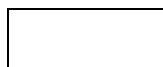
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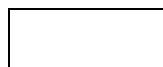
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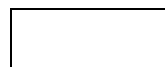
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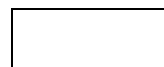
Clause No.	Tender Data
	<ul style="list-style-type: none"> <li>CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.</li> <li>Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1xProfessional Structural Technologist /Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.</li> <li>Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1x Structural Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or any other design project of similar nature and complexity.</li> </ul> <p><b>1 x Professional Hydraulics Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Hydraulics Technologist/ Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1x Hydraulics Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects.</li> </ul> <p><b>1 x Professional Geotechnical Engineer/Geologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering/Geotechnical engineering (BSC/BEng) or Geology</li> <li>CV demonstrating minimum of 10 years' experience in the geotechnical designs of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or liquid retaining structural projects, with more than 5 years' geotechnical design experience.</li> <li>Certified Copy of Professional registration with ECSA or SACNASP for at least five (5) years</li> </ul> <p><b>1 x Professional Process Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil/Chemical Engineering (BSC/BEng)</li> </ul>

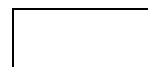
  
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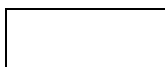
  
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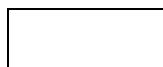
  
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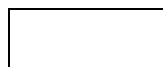
  
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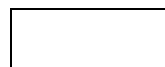
  
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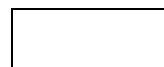
Clause No.	Tender Data
	<ul style="list-style-type: none"> <li>CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1 x Professional Process Technologist/Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1x Process Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating Minimum of 5 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> </ul> <p><b>1 x Professional Mechanical Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Mechanical Engineering (BSC/BEng)</li> <li>CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.</li> <li>Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Mechanical Technology/Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.</li> <li>Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Mechanical Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating Minimum of 5 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> </ul> <p><b>1 x Professional Electrical Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)</li> <li>CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.</li> <li>Certified Copy of ECSA Professional registration certificate</li> </ul> <p><b>1 x Professional Electrical Technologist/Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.</li> <li>Certified Copy of ECSA Professional registration certificate</li> </ul> <p><b>1x Professional Control and Instrumentation Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)</li> </ul>

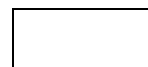
  
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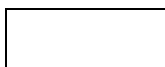
  
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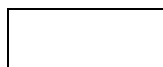
  
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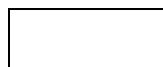
  
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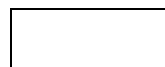
  
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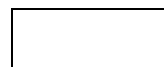
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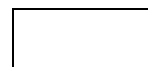
  
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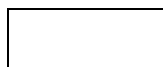
  
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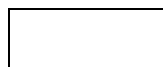
  
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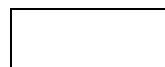
  
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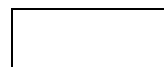
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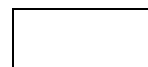
  
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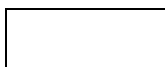
  
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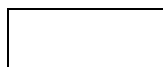
  
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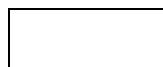
  
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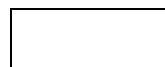
  
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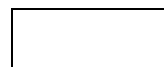
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	<p><b><u>REQUIRED DOCUMENTS:</u></b></p> <p><b>Bidders are required submitting the following documents with their bids:</b></p> <p><b>1 x Professional Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>• CV demonstrating a minimum of 10 years' experience in pavement design or stormwater management related projects, with more than 5 years' pavement design experience.</li> <li>• Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Civil Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>• Minimum of 5 years' experience in pavement design or stormwater related projects, with more than 5 years' pavement design experience.</li> </ul> <p><b>1x Professional Land Surveyor:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Land Survey</li> <li>• CV demonstrating a minimum of 5 years' experience in land survey related projects.</li> <li>• Copy of Professional registration with SAGC for at least three (3) years.</li> </ul> <p><b>1x Professional Construction Project Manager:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in the Built Environment</li> <li>• CV demonstrating a minimum of 5 years' experience in Management and Administration of pavement and stormwater management projects</li> <li>• Certified Copy of SACPCMP or PMP certificate.</li> </ul> <p><b>Previous relevant company experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of four (4) appointment and reference letters where bidder rendered consultation services in pavement design projects.</li> </ul> <p><b>Financial Ability/Capacity</b></p> <ul style="list-style-type: none"> <li>• Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act</li> </ul> <p><b>Company Registration:</b></p> <ul style="list-style-type: none"> <li>• Copy of Company Registration Documents (CIPC, Pty, CC, etc.)</li> </ul> <p><b>Failure to submit the above with the bid document will render the bid non-responsive</b></p> <p><b><u>Please Note:</u></b></p> <ol style="list-style-type: none"> <li>1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.</li> <li>2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.</li> <li>3. The Employer may appoint the same company for more than one discipline.</li> </ol>

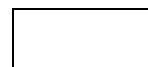
  
Contractor

  
Witness 1

  
Witness 2

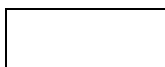
  
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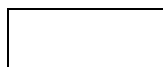
  
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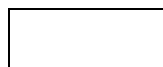
  
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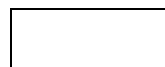


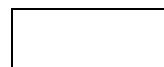
Clause No.	Tender Data				
	<p><b>4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).</b></p>				
	<p><b>3. BUILDING WORKS</b></p> <table> <tr> <th>EVALUATION ASPECT</th><th>MINIMUM REQUIREMENT</th></tr> <tr> <td>Staffing profile</td><td> <p><b>1 x Professional Architecture</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Architecture</li> <li>Minimum of 5 years' experience in the Architectural design/practice of building related projects.</li> <li>Professional registration with SACAP for at least three (3) years.</li> </ul> <p><b>1 x Professional Quantity Surveyor</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Quantity Survey</li> <li>Minimum of 5 years' experience in building related projects</li> <li>Professional registration with SACQSP for at least three (3) years.</li> </ul> <p><b>1 x Professional Structural Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in building projects.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul> <p><b>1 x Professional Mechanical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related mechanical infrastructure or similar mechanical Infrastructure.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul> <p><b>1 x Professional Electrical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related electrical infrastructure or similar Electrical infrastructure.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul> <p><b>1 x Professional Construction Project Manager</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 3 years' experience in Management and Administration of Building Related Projects.</li> <li>Professional registration with SACPCMP or PMP for at least three (3) years.</li> </ul> </td></tr> </table>	EVALUATION ASPECT	MINIMUM REQUIREMENT	Staffing profile	<p><b>1 x Professional Architecture</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Architecture</li> <li>Minimum of 5 years' experience in the Architectural design/practice of building related projects.</li> <li>Professional registration with SACAP for at least three (3) years.</li> </ul> <p><b>1 x Professional Quantity Surveyor</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Quantity Survey</li> <li>Minimum of 5 years' experience in building related projects</li> <li>Professional registration with SACQSP for at least three (3) years.</li> </ul> <p><b>1 x Professional Structural Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in building projects.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul> <p><b>1 x Professional Mechanical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related mechanical infrastructure or similar mechanical Infrastructure.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul> <p><b>1 x Professional Electrical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related electrical infrastructure or similar Electrical infrastructure.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul> <p><b>1 x Professional Construction Project Manager</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 3 years' experience in Management and Administration of Building Related Projects.</li> <li>Professional registration with SACPCMP or PMP for at least three (3) years.</li> </ul>
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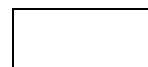
  
Contractor

  
Witness 1

  
Witness 2

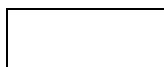
  
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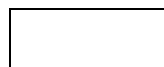
  
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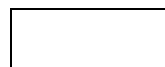
  
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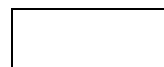


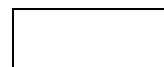
Clause No.	Tender Data						
	<table><tr><td>Previous relevant company experience</td><td>A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings</td></tr><tr><td>Financial ability to execute the contract. (three years (3) financial statements)</td><td>A Minimum Turn-Over of R 1 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).</td></tr><tr><td>Company Registration</td><td>Company registered and in Operation for four (4) years, with a minimum turn-over of R 500 000 for the latest three (3) consecutive financial years.</td></tr></table>	Previous relevant company experience	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings	Financial ability to execute the contract. (three years (3) financial statements)	A Minimum Turn-Over of R 1 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).	Company Registration	Company registered and in Operation for four (4) years, with a minimum turn-over of R 500 000 for the latest three (3) consecutive financial years.
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<b>Bidders are required submitting the following documents with their bids:</b>							
<b>1 x Professional Architecture</b>							
<ul style="list-style-type: none"><li>• Certified Copy of Bachelor's Degree in Architecture.</li><li>• Cv demonstrating Minimum of 5 years' experience in the Architectural design/practice of building related projects.</li><li>• Certified Copy of Professional registration with SACAP.</li></ul>							
<b>1 x Professional Quantity Surveyor</b>							
<ul style="list-style-type: none"><li>• Certified Copy of Bachelor's Degree in Quantity Survey</li><li>• CV demonstrating minimum of 5 years' experience in building related projects</li><li>• Certified Copy of Professional registration with SACQSP.</li></ul>							
<b>1x Professional Structural Engineer/Technologist:</b>							
<ul style="list-style-type: none"><li>• Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li><li>• CV demonstrating a minimum of 5 years' experience in building infrastructure projects.</li><li>• Certified Copy of ECSA Professional registration certificate.</li></ul>							
<b>1x Professional Mechanical Engineer/Technologist:</b>							
<ul style="list-style-type: none"><li>• Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li><li>• CV demonstrating a minimum of 5 years' experience building related mechanical infrastructure projects.</li><li>• Certified Copy of ECSA Professional registration certificate.</li></ul>							
<b>1x Professional Electrical Engineer/Technologist:</b>							
<ul style="list-style-type: none"><li>• Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li><li>• CV demonstrating a minimum of 5 years' experience in building related electrical infrastructure projects.</li><li>• Certified Copy of ECSA Professional registration certificate.</li></ul>							

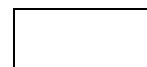
  
Contractor

  
Witness 1


  
Witness 2


  
Employer


  
Witness 1


  
Witness 2


Clause No.	Tender Data
	<p><b>1x Professional Construction Project Manager:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in the Built Environment</li> <li>• CV demonstrating a minimum of 5 years' experience in Management and Administration of Water and Sanitation Related Projects.</li> <li>• Certified Copy of SACPCMP or PMP certificate.</li> </ul> <p><b>Previous relevant company experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings</li> </ul> <p><b>Financial Ability/Capacity</b></p> <ul style="list-style-type: none"> <li>• Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act.</li> </ul> <p><b>Company Registration:</b></p> <ul style="list-style-type: none"> <li>• Copy of Company Registration Documents</li> </ul> <p><b>Failure to submit the above with the bid document will render the bid non-responsive</b></p> <p><b><u>Please Note:</u></b></p> <ol style="list-style-type: none"> <li>1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.</li> <li>2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.</li> <li>3. The Employer may appoint the same company for more than one discipline.</li> <li>4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).</li> </ol>
F.2.2	<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>
F.2.3	<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 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.</p>
F.2.4	<p><b>Confidentiality and copyright of documents</b></p> <p>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.</p>


  
Contractor

  
Witness 1

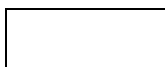
  
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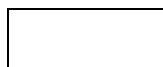
  
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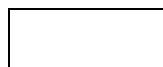
  
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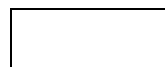
  
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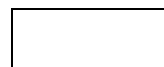
Clause No.	Tender Data		
<b>F.2.5</b>	<b>Reference Documents</b> Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.		
<b>F 2.6</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 briefing/clarification meeting are:</b> <table border="1"> <tr> <td> <b>Date: 24 MARCH 2023</b>  <b>Time: 10h00</b> </td><td> <b>Via VIRTUAL ZOOM MEETING (Registration will be required)</b>   <b>Zoom link:</b> <a href="https://erwat-za.zoom.us/meeting/register/tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-">https://erwat-za.zoom.us/meeting/register/tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-</a> </td></tr> </table> <p>Before tendering, bidders should visit the site and acquaint themselves with all the local conditions, the accessibility of the site, the full extent and nature of the operations, the supply of and conditions affecting labour, carriage, carting, unloading, storage and safe custody of materials, workshop accommodation, the scaffolding, tackle and tools necessary for the execution of the contract generally.</p> <p>Bidders are required to thoroughly acquaint themselves with the nature and extent of the work to be done, and to make allowance for items obviously intended and necessary for the proper completion of the work although not specifically specified. Claims due to lack of knowledge will not be entertained.</p> <p>All uncertainties shall be cleared out with the end user department before the tender closing date. No individual should represent more than one bidder at the compulsory briefing session. At least one member of the JV must be present at the compulsory clarification meeting. At least one member of the JV be represented at the compulsory clarification meeting.</p> <p>Kindly note that the company representative that attends this session will be accepted as a person with the relevant technical expertise applicable to this bid.</p> <p>Non-completion in full of the fields required on the attendance register will lead to automatic disqualification.</p> <p>Please note: where a clarification meeting is compulsory, no bids will be accepted if the contractor has not attended this session and documents will only be accepted from contractors whose names appear on the attendance register.</p>	<b>Date: 24 MARCH 2023</b> <b>Time: 10h00</b>	<b>Via VIRTUAL ZOOM MEETING (Registration will be required)</b>  <b>Zoom link:</b> <a href="https://erwat-za.zoom.us/meeting/register/tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-">https://erwat-za.zoom.us/meeting/register/tJYrde-rrDovHtMDy1St2vh0ebnD1X7LfJy-</a>
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<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).		

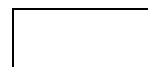
  
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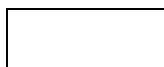
  
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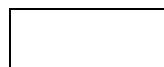
  
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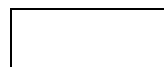
  
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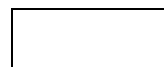
  
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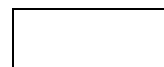
Clause No.	Tender Data
	<p>The tendered price must provide for items required for the execution of the required services as per the scope of work and provided for in the pricing scheduled/Bill of Quantities.</p> <p>Bidders are required to check their calculations for arithmetical errors as the total Tender price, as submitted, will remain fixed.</p> <p>The Value Added Tax (Act 89 of 1991) as amended, is applicable.</p> <p>All prices quoted are to INCLUDE Value Added Tax (VAT), unless specifically stated to the contrary and all prices must be quoted in ZAR, i.e. the currency of the Republic of South Africa.</p> <p>Where the whole or a portion of the tendered price may be affected by rates of currencies or variations in the rate of exchange, the bidder shall, in terms of the tender requirements, state in his tender the amount in foreign currency to be paid or remitted abroad and the exchange rate applied in the conversion of this amount into South African currency in calculating the tender price.</p>
<b>F.2.11</b>	<p><b>Alterations to documents</b></p> <p>Bidders must not make any alterations, erasure or additions in the proposal document or pricing schedule/BOQ, except to comply with instructions issued by the employer. All signatories to the Tender offer shall sign next to any alterations in such case.</p> <p>Any alteration, erasure or addition made will not be recognised and the original wording of the Document will prevail. Copies are not allowed; only original documents will be accepted.</p> <p>Bidders shall clarify any doubt about the meaning of any wording in the pricing schedule/bill of quantities <b>before</b> the Tender closing date. The use of correction fluid/tape is strictly prohibited and will render your bid invalid.</p>
<b>F.2.12</b>	No alternative bid offer will be considered
<b>F.2.13</b>	<p><b>Submitting a Tender offer</b></p> <p>No late, faxed, emailed or other form of Tender will be accepted. Completed Tender documents with attached documents, if any, must be submitted in Black ink in sealed envelope and clearly marked:</p> <p><b><u>“CONTRACT NO ERW2211/02: THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS”</u></b></p> <p>and must be placed in the Public 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>
<b>F.2.13.5</b>	The <b>whole original</b> bid document, as issued by the ERWAT, shall be submitted. Bids may only be submitted on the Bid documentation issued by ERWAT.

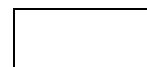
  
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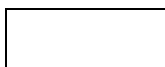
  
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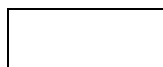
  
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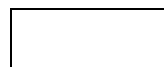
  
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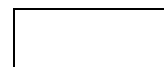
  
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Clause No.	Tender Data
F.2.14	<p><b>Information and data to be completed in all respects.</b></p> <p>To facilitate review of this Tender by ERWAT, it is requested that submissions conform to the following format:</p> <ol style="list-style-type: none"> <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 (<b>3 pages maximum</b>) 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> </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</p> <p>signed by the responsible person duly authorised to sign all documents indicated on the returnable document <b>"FORM C Authority of Signatory"</b>.</p> <p>The above is to be read in conjunction with F3.11 below as well as the Project Specifications detailed in Section 2 of the bid document.</p>
F.2.15.1	<p><b>Closing time</b></p> <p><b>Closing Date: 19 APRIL 2023</b></p> <p><b>Closing Time: 12h00</b></p>
F.2.16	<p><b>Tender offer validity</b></p> <p>Unless otherwise specified in the invitation to bid, this bid shall remain open for acceptance for a period OF <b><u>ONE HUNDRED AND TWENTY (120) CONSECUTIVE DAYS</u></b> from the date on which bids are due and during this period the Bidder shall agree not to withdraw his/her bid or impair or derogate from its effect;</p> <p>The written approval of this bid by ERWAT, by way of letter of acceptance, shall constitute a contract binding on both parties;</p>

  
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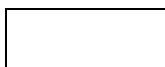
  
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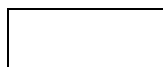
  
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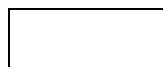
  
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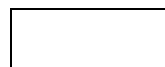
  
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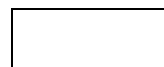
Clause No.	Tender Data
	Notwithstanding anything to the contrary in this agreement, the contract shall come into existence with effect from the signature date signed by both parties.
<b>F.2.18</b>	<p><b>Provide other information</b></p> <p>The bidders are required to submit the following documents. Failure to submit may render your bid invalid and be disqualified:</p> <ol style="list-style-type: none"> <li>(1) (Proof of SARS Tax status (pin issued by the South African Revenue Services);</li> <li>(2) Complete all MBD documents and all the forms as set out in the returnable schedule;</li> <li>(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.</li> <li>(4) In case of Joint Venture – the Joint Venture Agreement</li> <li>(5) Letter of intent to submit Third Party Liability Insurance and All risk contractor's insurance to cover this contract.</li> </ol> <p><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></p>
<b>F.3.2</b>	<p><b>Issue Addenda</b></p> <p>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.</p>
<b>F.3.4</b>	<p><b>Opening of Tender Submissions</b></p> <p>Bids are opened in public on closing date and time at ERWAT Head Office, Hartbeestfontein Office Park, R25 (Bapsfontein / Bronkhorstspuit), Kempton Park.</p>
<b>F.3.5</b>	<p><b>Two-envelope System</b></p> <p>A two-envelope procedure will <b>NOT</b> be followed.</p>
<b>F.3.6</b>	<p><b>Non-disclosure</b></p> <p>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.</p>
<b>F.3.9</b>	<p><b>Arithmetical Errors</b></p> <p>Check responsive Bid offers for arithmetical errors, correcting them in the following manner:</p> <ol style="list-style-type: none"> <li>a) Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.</li> <li>b) If a Bill of Quantities (or schedule of rates) apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate will be corrected.</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 Bidder's addition of prices, the total of the prices shall govern and the Bidder will be asked to revise selected item prices (and their rates if a bills of quantities applies) to achieve the Bided total of the prices.</li> </ol> <p>Consider the rejection of a Bid offer if the Bidder does not correct or accept the correction of his arithmetical errors in the manner described above.</p>

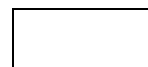
  
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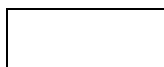
  
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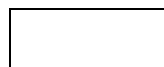
  
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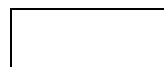
  
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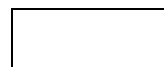
  
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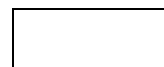
Clause No.	Tender Data
F.3.11	<p><b>Evaluation of tender offers</b></p> <p>The Bidder's notice is drawn to the fact that the evaluation, adjudication and awarding of this Tender will be in terms of the Supply Chain Management Policy of ERWAT and the Preferential Procurement Regulations of 2022.</p> <p>ERWAT will establish a Bid Evaluation Committee (BEC) whose responsibility it is to make recommendations to the Bid Adjudication Committee (BAC). The BEC will shortlist and evaluate the bid document in accordance with the criteria below and make recommendation to the BAC:</p> <p><b>Stage 1: SCM Pre-compliance/Administrative compliance:</b> All the pre-qualified bidders shall progress through to functionality evaluation. Where some SCM pre-compliance information is not provided the supply chain department of ERWAT shall contact the responsible bidder to submit within 5 working days and failure to do so will result in disqualification</p> <p><b>Stage 2: Technical/Functionality Evaluation:</b> All bidders shall be required to comply with the Minimum requirements that have been stipulated for each of the disciplines, the requirements serve as an indicative means to test the functionality of the bidders. All bidders shall be required to comply with the minimum specified technical requirements in order to be considered for further evaluation in the disciplines that they are interested, failure to comply will result in disqualification.</p> <p>3. <b>Stage 3: Price and Preference:</b> Scoring of all eligible Bids having progressed through the second stage of evaluation in terms of Price and Preference only, by:</p> <p>Confirming that that Tenderers progressing beyond the second stage are eligible for the preferences claimed, and if so,</p> <p>3.2. Scoring Bid evaluation points for price and preference points.</p> <p>3.3. Calculating the total Bid evaluation points, to two decimal places based on the Price and Preference (90:10)</p> <p>3.4. Rank Bid offers from the highest number of Bid evaluation points to the lowest.</p> <p>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.</p> <p><b><u>STAGE 1: SCM PRE-COMPLIANCE</u></b></p> <p>Bidders are required to submit supporting documents for evaluation purposes. Kindly note that ERWAT reserves the right to request bidders for further clarity or information during the bid evaluation phase. Failure to submit the required information may result in disqualification:</p> <ol style="list-style-type: none"> <li>1. Completion of MBD 1, 2, 3.3, 4, 6.1, 7.2</li> <li>2. Completion of Form A to Form P</li> <li>3. Copy of municipal statement or letter from landlord stating not older than 3 months.</li> <li>4. Letter of intent to submit Third Party Liability Insurance and All risk contractor's insurance to cover this contract.</li> <li>5. Proof of attendance register of the compulsory briefing session as posted on ERWAT website.</li> </ol>

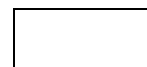
  
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Clause No.	Tender Data																		
	<p>6. Any and all other information required in terms of section T2, which has to be submitted with the tender.</p> <p>7. Specialist members of team meets the minimum requirements in terms of qualifications and experience that is validated through affidavits:</p> <p><b><u>STAGE 2 : FUNCTIONALITY/TECHNICAL EVALUATION</u></b></p> <p><b>FUNCTIONALITY/TECHNICAL EVALUATION</b></p> <p>All bidders shall be required to comply with the minimum requirements that have been stipulated for each of the disciplines, the requirements serve as an indicative means to test the functionality of the bidders. The functionality evaluation is based on the evaluation framework described in the table below:</p> <table border="1"> <thead> <tr> <th>EVALUATION ASPECT</th> <th>EVALUATION FRAMEWORK</th> </tr> </thead> <tbody> <tr> <td>1. Staffing profile</td> <td>                     a. Key Staff Personnel available for this contract                      b. Experience of the Key staff Personnel                      c. Qualifications and or Professional registration of Key Staff                 </td> </tr> <tr> <td>2. Previous relevant company experience</td> <td>                     a. Experience in the relevant technical field                      b. Size of contracts in relevant technical field                      c. Some or all the references will be contacted to obtain the input of the referring client.                 </td> </tr> <tr> <td>3. Financial ability to execute the contract.</td> <td>                     a. Proposed Surety/Professional indemnity                      b. A Minimum Turn-Over in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).                      c. Contact the bidder's bank manager to assess the bidder's financial ability to execute the contract and the bidder hereby grants his consent for this purpose.                 </td> </tr> <tr> <td>4. Company Registration</td> <td>                     a. Company registered and in Operation for four (4) years.                      b. Minimum Annual Turn-Over                 </td> </tr> </tbody> </table> <p><b><u>STAGE 3: PRICE AND PREFERENCE POINTS EVALUATION</u></b></p> <p>The applicable preference point system for this tender is the 90/10 preference point system.</p> <table border="1"> <thead> <tr> <th></th> <th>POINTS</th> </tr> </thead> <tbody> <tr> <td><b>PRICE</b></td> <td>90</td> </tr> <tr> <td><b>SPECIFIC GOALS</b></td> <td>10</td> </tr> <tr> <td><b>TOTAL POINTS FOR PRICE AND SPECIFIC GOALS</b></td> <td><b>100</b></td> </tr> </tbody> </table>	EVALUATION ASPECT	EVALUATION FRAMEWORK	1. Staffing profile	a. Key Staff Personnel available for this contract b. Experience of the Key staff Personnel c. Qualifications and or Professional registration of Key Staff	2. Previous relevant company experience	a. Experience in the relevant technical field b. Size of contracts in relevant technical field c. Some or all the references will be contacted to obtain the input of the referring client.	3. Financial ability to execute the contract.	a. Proposed Surety/Professional indemnity b. A Minimum Turn-Over in the most recent Financial Year (the Financial Years shall be determined according to the Company registration). c. Contact the bidder's bank manager to assess the bidder's financial ability to execute the contract and the bidder hereby grants his consent for this purpose.	4. Company Registration	a. Company registered and in Operation for four (4) years. b. Minimum Annual Turn-Over		POINTS	<b>PRICE</b>	90	<b>SPECIFIC GOALS</b>	10	<b>TOTAL POINTS FOR PRICE AND SPECIFIC GOALS</b>	<b>100</b>
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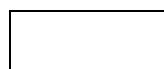
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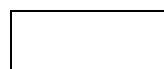
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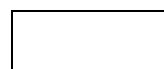


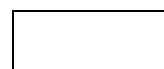
Clause No.	Tender Data
	Regulations of disputes, objections, complaints, and queries will be handled in accordance with the Supply Chain Management Policy of ERWAT.
<b>F.3.14</b>	<p><b>Contract Documents</b></p> <p>The Professional Services Agreement, Service Level Agreement (if applicable), Bid document and related attachments shall constitute the complete contract agreement.</p> <p>It should be noted that all ERWAT contracts are subject to the Municipal Financial Management Act (MFMA Act 56 of 2003), therefore in the event that there is any contradiction between the MFMA (<i>Act 56 of 2003</i>) and the GCC or any other applicable contractual agreement, the MFMA (<i>Act 56 of 2003</i>) and its applicable regulations shall take precedence.</p>
<b>F.3.17</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><b>The additional conditions of the Proposal are:</b></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> </ol>
	<p><b><u>Payment Terms:</u></b></p> <ol style="list-style-type: none"> <li>(a) All payments will be discussed and agreed upon on the SLA.</li> <li>(b) Standard payment terms are 30 Days from receipt of valid invoice/tax invoice <b><u>and statement.</u></b></li> </ol> <p>ERWAT will not accept any responsibility for the payment of any invoices submitted by the successful bidder(s) if the relevant invoice does not reflect an official ERWAT order number.</p>
	<p><b><u>Existing Works and Service:</u></b></p> <p>The bidder is responsible for obtaining information regarding services and existing works, which may be affected by this bid.</p> <p>Before the Bidder commences with services, they shall discuss with and have the approval from the Infrastructure Planning and Projects (IPAP) Department.</p> <p>The Bidder shall be held responsible for any damage, injury or accident caused as a result of his failure to take the necessary precautionary measures.</p>

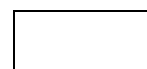
  
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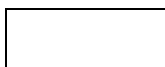
  
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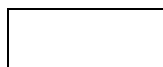
  
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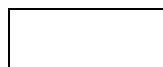
  
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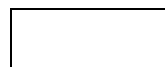
  
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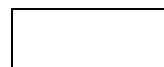
Clause No.	Tender Data
	Should the Bidder in any event be responsible for the interruption of services without approval, the contractor shall be held responsible for any claims that may arise in this regard.
	<p><b><u>Patents:</u></b></p> <p>The Bidder shall pay all royalties and expenses and be liable for all claims in respect of the use of patent rights, trade marks or other protected rights and hereby indemnifies ERWAT against any claims arising there-from.</p> <p>All intellectual property rights including, without limitation, copyright, database rights, design and registered design rights, patents and trademark rights, in the deliverables shall be owned by ERWAT.</p> <p>The contractor, bidder or service provider shall execute any documents to ensure vesting of such rights in the Entity (ERWAT). No trademark, patent, design or other registration shall be made in the name of the contractor, bidder or service provider, its employees, directors and agents, in relation to any of the deliverables.</p>
	<p><b><u>Registration with relevant regulatory authority:</u></b></p> <p>Bidders, who are compelled to register with controlling authorities regarding their goods/services to be delivered/rendered, should ensure that their relevant registrations are in order prior to the closure of the bids.</p> <p>ERWAT may at any given time request bidders to submit proof thereof.</p>
	<p><b><u>Penalties:</u></b></p> <p>Should the bidder fail to deliver any or all the goods or perform the services within the period specified in the contract or as concluded in the Agreement (i.e all the documents that form the agreement such as Service level agreement, bid document and engineering contract,etc) , ERWAT may, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the originally agreed contract price using the current prime interest rate calculated for each day until actual delivery of performance.</p> <p>ERWAT may consider termination of the contract at it sees fit in terms of the General Conditions of Contract.</p>
	<p><b><u>Increase/decrease in scope of work</u></b></p> <p>The Employer reserves the right to award the bid in part, split the bid or award in total. The Bidder will have no claim in this respect.</p> <p>Funds allocated to complete the works may be limited. The Employer thus reserves the right to reduce or add to the scope of work to suit the available budget, in which case the contractor will have no claim in this respect.</p>

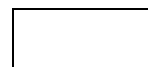
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

Clause No.	Tender Data
	<p><b><u>Domicile &amp; South African Jurisdiction</u></b></p> <p>The laws of the Republic of South Africa shall be applicable to each Contract created by the acceptance of a Bid, and each Bidder shall indicate a place in the Republic and specify it in his Bid as his <i>domicilium citandi et execuntandi</i> where any legal process may be served on him.</p> <p>Each Bidder shall bind himself to accept the jurisdiction of the Courts of Law of the Republic of South Africa.</p> <p>The parties choose as their respective <i>domicilia citandi et executandi</i> the Following addresses: <b>ERWAT</b></p> <p>ERWAT Head Office, Hartbeestfontein Office Park, R25 (Bapsfontein / Bronkhorstspuit), Kempton Park.</p> <p><b><i>The Contractor (physical address):</i></b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Change of these addresses will only be valid if the other party has been notified in writing.</p> <p>All notices between the parties concerned must be in writing. If a notice or document is delivered by hand, a written proof of delivery must be obtained; and If not delivered by hand, notices and documents will be sent by registered post; and If a document is delivered by an official of ERWAT, a statement to that effect will be sufficient.</p>
	<p><b><u>Bid Award</u></b></p> <p>1 ERWAT requires bidders to perform work of high quality as set out in this bid.</p> <p>2 The lowest tender will not necessarily be accepted and ERWAT reserves the right to accept a tender either as a whole or in part, has the right to award the bid to more than one bidder, or not accept any bid.</p> <p>3 Please note that even though a bid may be awarded and a successful bidder be approved to supply, deliver or render the applicable services to ERWAT, it is not a guarantee that orders will be placed on a regular basis and may only be required on an as and when required basis and will be valid on receipt of an official ERWAT order only.</p>
	<p><b><u>Non-Awards</u></b></p> <p>Kindly note that bidders, who have submitted a tender, may visit the ERWAT website: <a href="http://www.erwat.co.za">www.erwat.co.za</a> to view the outcome of the relevant bid.</p> <p>In the event that no correspondence or communication is received from ERWAT within 120</p>

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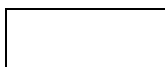
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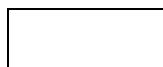
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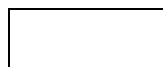
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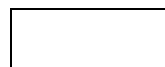
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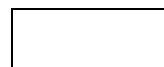
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	<p>consecutive days after the stipulated closing date and time of the Tender, the tender will be deemed to be unsuccessful.</p> <p>The unsuccessful bidder may on written request (in terms of the Access to Information Act) be given reason why their bid was unsuccessful.</p>
	<p><b><u>Right to Appeal</u></b></p> <p>Bidders may appeal against the decision by giving written notice of the appeal and reasons to the Municipal Manager within 21 days of the date of the notification of the decision as provided for by Section 62 of the Municipal Systems Act 32 of 2000.</p>
	<p><b><u>DISCLAIMER – WITHOUT PREJUDICE</u></b></p> <p>While every effort is being made to ensure that specifications are drafted in an unbiased manner to allow all potential suppliers to offer their goods or services as set in Regulation 27 of the MFMA Act - SCM Regulations; ERWAT assumes no liability or responsibility for the completeness, accuracy or usefulness of any of the information.</p> <p>However, in the event that reference is made (intentional or non-intentional) to a particular trade mark, name, patent, design, type, specific origin or producer, ERWAT's intent is of such that there is no other sufficiently precise or intelligible way of describing the characteristics of the works/goods/services required, in which case the bidder must interpret such reference as indicative only and is thus required to offer such and or an equivalent.</p> <p>Any reference to any of the above potential trade barriers must be deemed to also include or refer to the "equivalent".</p> <p>Bidders may submit alternative offers subject to such meeting all the minimum standards, specifications, technical data and or legislative provisions applicable to such.</p> <p>ERWAT does however reserve the right to scrutinise any alternative offers but is under no obligation to accept or award on any alternative offer submitted.</p>
	<p><b><u>CONFIDENTIALITY</u></b></p> <p><b>Over and above the provisions of clause B34 of the general conditions of contract, the following will apply.</b> In the process of representing ERWAT in any matter, the Bidder will have access to sensitive and confidential information. All information accessed, obtained or collected by the Bidder and/or his employees must at all times be kept confidential and not be disclosed to any other person without the prior and written authorisation of the ERWAT.</p> <p>In addition, the information may not be used for personal gain by the Bidder or the Bidder's business, employee, sub-contractor, agent; or any other person, body/organisation, family member receiving that information or data through the Bidder, or any of their employees or agents.</p>

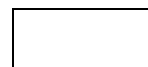
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

Clause No.	Tender Data
	Failure to observe these conditions will constitute a breach of contract, which could result in termination of this contract
	<p><b><u>PROMOTION OF ACCESS TO INFORMATION ACT, ACT 2 OF 2000</u></b></p> <p>The Bidder will be required to fully comply with the requirements of the “Access to Information Act, Act 2 of 2000 ”.</p> <p>In terms the Promoting the “Access to Information Act, Act 2 of 2000”, ERWAT is obliged to provide certain information to the general public.</p> <p>The Bidder ,as part of his/her function in collecting data on behalf of ERWAT will be required to comply with the provisions of the “Promotion of Access to Information Act, Act 2 of 2000”.</p> <p>The extent to which a bidder is obliged to supply or refuse the supply information in terms of the Act shall be determined in consultation with ERWAT.</p>
	<p><b><u>EXTRACTION OF AND DESTROYING OF DATA</u></b></p> <p>The Bidders are required to submit to ERWAT all data in a readable, accessible format at the end of their contract.</p> <p>Bidders will be required to keep records of such data for a minimum period of 6 months where after such must be destroyed and proof thereof submitted to ERWAT.</p>
	<p><b><u>ERWAT GENERAL NOTES:</u></b></p> <p>ERWAT reserves the right to award the bid to one or more than one bidder (split between the three districts)</p> <p>Appointed bidders and their personnel will be required to but not limited to:</p> <ul style="list-style-type: none"> <li>• Attend site induction training before any work can be undertaken.</li> <li>• Request and Receive all the relevant work permits/access control and authorizations have to be obtained before any work can be undertaken after approval of the Safety and Health Plan.</li> <li>• The relevant requirement with regards to the Occupational Health and safety act has to be complied with, with particular reference to the safety file in accordance with the relevant commodity and scope of work items covered by this document taking into consideration that the most current regulation will always take precedence.</li> <li>• Submit proof that all the required equipment, tools, consumables, etc. required to</li> </ul>

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Clause No.	Tender Data
	<p>perform the work as per the Contract shall be provided by the Contractor.</p> <p>ERWAT reserves the right to hold the Contractor responsible for any equipment /infrastructure belonging to ERWAT that may be damaged due to Contractor's negligence or poor workmanship.</p>

## **EVALUATION CRITERIA**

ERWAT will establish a Bid Evaluation Committee (BEC) whose responsibility 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

**Stage 1: SCM Pre-compliance/Administrative compliance:** All the pre-qualified bidders shall progress through to functionality evaluation. Where some SCM pre-compliance information is not provided the supply chain department of ERWAT shall contact the responsible bidder to submit within 5 working days and failure to do so will result in disqualification

**Stage 2: Technical Evaluation:** All bidders shall be required to comply with the Minimum requirements that have been stipulated for each of the disciplines, the requirements serve as an indicative means to test the functionality of the bidders. All bidders shall be required to comply with the minimum specified technical requirements in order to be considered for further evaluation in the disciplines that they are interested, failure to comply will result in disqualification.

- Stage 3: Price and Preference:** Scoring of all eligible Bids having progressed through the second stage of evaluation in terms of Price and Preference only, by:

Confirming that that Tenderers progressing beyond the second stage are eligible for the preferences claimed, and if so,

- 3.2. Scoring Bid evaluation points for price and preference points.
- 3.3. Calculating the total Bid evaluation points, to two decimal places based on the Price and Preference (90:10)
- 3.4. Rank Bid offers from the highest number of Bid evaluation points to the lowest.

Recommend Bidders with the highest number of Bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

## **FUNCTIONALITY/TECHNICAL EVALUATION**

Functionality evaluation shall be based on the evaluation framework stipulated in the table below:

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Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

EVALUATION ASPECT	EVALUATION FRAMEWORK
1. Staffing profile	<ul style="list-style-type: none"> <li>a. Key Staff Personnel available for this contract</li> <li>b. Experience of the Key staff Personnel</li> <li>c. Qualifications and or Professional registration of Key Staff</li> </ul>
2. Previous relevant company experience	<ul style="list-style-type: none"> <li>a. Experience in the relevant technical field</li> <li>b. Size of contracts in relevant technical field</li> <li>c. Some or all the references will be contacted to obtain the input of the referring client.</li> </ul>
3. Financial ability to execute the contract.	<ul style="list-style-type: none"> <li>a. Proposed Surety/Professional indemnity</li> <li>b. A Minimum Turn-Over in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).</li> <li>c. Contact the bidder's bank manager to assess the bidder's financial ability to execute the contract and the bidder hereby grants his consent for this purpose.</li> </ul>
4. Company Registration	<ul style="list-style-type: none"> <li>a. Company registered and in Operation for four (4) years.</li> <li>b. Minimum Annual Turn-Over</li> </ul>

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 the 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.

Functionality Documentation must either be attached to the applicable Returnable Schedule as stated below or can be bound into a separate volume and clearly referenced to in each of the applicable schedules. **If the functionality document is not attached to the page or clearly referenced, it will be deemed not to have been included.**

The information submitted with each Bid will be evaluated against the criteria in the table below: Tenderers shall ensure that their proposals are suitable to be evaluated through the criteria covered in the table below, and the case for which no information is provided, the bid shall be rejected. The professional service provider shall be expected to comply with the minimum requirements stipulated for each respective discipline listed in the tables below:

## 1. WASTEWATER INFRASTRUCTURE

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
Staffing profile	<p><b>1 x Professional Structural Engineer</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>• Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> <li>• Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Structural Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> </ul>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
	<ul style="list-style-type: none"> <li>Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Structural Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures related projects.</li> </ul>	
	<p><b>1 x Professional Geotechnical Engineer or Geologist.</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering/Geotechnical engineering (BSC/BEng) or Geology</li> <li>Minimum of 10 years' experience in the geotechnical designs of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or liquid retaining structural projects, with more than 5 years' geotechnical design experience.</li> <li>Professional registration with ECSA or SACNASP for at least five (5) years.</li> </ul>	
	<p><b>1 x Professional Hydraulics Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Hydraulics Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Hydraulics Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the Hydraulic design of Bulk sewer pipes and Wastewater Treatment or Water Treatment works.</li> </ul>	

Contractor

Witness 1

Witness 2

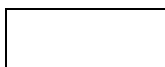
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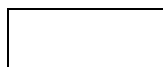
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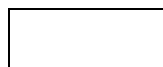
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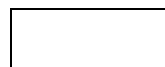


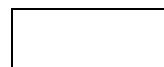
EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
	<p><b>1x Professional Process Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1x Professional Process Technologist/Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Process Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> </ul>	
	<p><b>1 x Professional Mechanical Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Mechanical Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Mechanical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure or similar industrial Mechanical Infrastructure.</li> </ul>	
	<p><b>1 x Professional Electrical Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation Electrical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Electrical Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> </ul>	

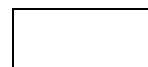
  
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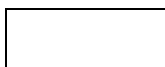
  
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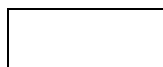
  
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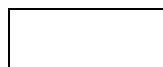
  
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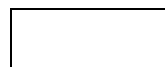
  
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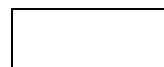
EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
	<ul style="list-style-type: none"> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation Electrical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	
	<p><b>1x Professional Control and Instrumentation Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical/Electronic Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1x Professional Control and Instrumentation Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical/Electronic Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	
	<p><b>1 x Professional Construction Project Manager</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 10 years' experience in Management and Administration of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure Projects.</li> <li>Professional registration with SACPCMP or PMP for at least five (5) years.</li> </ul>	
<b>Previous relevant company experience</b>	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction (ECSA Stages 1 to 6) of Wastewater Treatment or Water Treatment or Bulk Water or Wastewater retaining infrastructure for a minimum total of R 25 million per project (Total project value).	
<b>Financial ability to execute the contract. (three years (3) financial statements)</b>	A Minimum Turn-Over of R 10 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).	
<b>Company Registration</b>	Company registered and in Operation for four (4) years, with a minimum turn-over of R 5 000 000 for the latest three (3) consecutive financial years.	

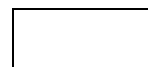
  
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Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

## **REQUIRED DOCUMENTS:**

**Bidders are required submitting the following documents with their bids:**

### **1xProfessional Structural Engineer:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)
- CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.
- Certified Copy of ECSA Professional registration certificate.

### **1xProfessional Structural Technologist /Engineer:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.
- Certified Copy of ECSA Professional registration certificate.

### **1x Structural Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or any other design project of similar nature and complexity.

### **1 x Professional Hydraulics Engineer:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)
- CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.
- Certified Copy of Professional registration with ECSA for at least five (5) years.

### **1 x Professional Hydraulics Technologist/ Engineer:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.
- Certified Copy of Professional registration with ECSA for at least five (5) years.

### **1x Hydraulics Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects.

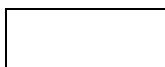
### **1 x Professional Geotechnical Engineer/Geologist:**

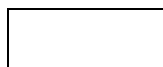
- Certified Copy of Bachelor's Degree in Civil Engineering/Geotechnical engineering (BSC/BEng) or Geology
- CV demonstrating minimum of 10 years' experience in the geotechnical designs of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or liquid retaining structural projects, with more than 5 years' geotechnical design experience.
- Certified Copy of Professional registration with ECSA or SACNASP for at least five (5) years

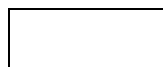
### **1 x Professional Process Engineer:**

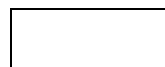
- Certified Copy of Bachelor's Degree in Civil/Chemical Engineering (BSC/BEng)

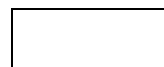
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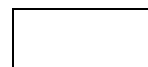
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

- CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.
- Certified Copy of ECSA Professional registration certificate.

**1 x Professional Process Technologist/Engineer:**

- Certified Copy of Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)
- CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.
- Certified Copy of ECSA Professional registration certificate.

**1x Process Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 5 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.

**1 x Professional Mechanical Engineer:**

- Certified Copy of Bachelor's Degree in Mechanical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.
- Certified Copy of Professional registration with ECSA for at least five (5) years.

**1 x Professional Mechanical Technologist/Engineer:**

- Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.
- Certified Copy of Professional registration with ECSA for at least five (5) years.

**1 x Mechanical Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 5 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.

**1 x Professional Electrical Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.
- Certified Copy of ECSA Professional registration certificate.

**1 x Professional Electrical Technologist/Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.
- Certified Copy of ECSA Professional registration certificate.

**1x Professional Control and Instrumentation Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.
- Certified Copy of ECSA Professional registration certificate.

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

**1x Professional Control and Instrumentation Technologist/Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.
- Certified Copy of ECSA Professional registration certificate.

**1x Professional Construction Project Manager:**

- Certified Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 3 years' experience in Management and Administration of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure projects or any other construction project of similar nature and complexity.
- Certified Copy of SACPCMP or PMP certificate.

**Previous relevant company experience:**

- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction (ECSA stages 1 to 6) of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure for a minimum total of R 25 million per project (Total project value).

**Financial Ability/Capacity:**

- Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act.

**Company Registration:**

- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

**Failure to submit the above with the bid document will render the bid non-responsive**

**Please Note:**

1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.
2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.
3. The Employer may appoint the same company for more than one discipline.
4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

## 2. ROADS AND STORMWATER MANAGEMENT

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
Staffing profile	<b>1 x Professional Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in pavement design or stormwater management related projects, with more than 5 years' pavement design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	
	<b>1 x Civil Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in pavement design or stormwater related projects, with more than 5 years' pavement design experience.</li> </ul>	
	<b>1 x Professional Land Surveyor</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Land Survey</li> <li>Minimum of 5 years' experience in land survey related projects.</li> <li>Professional registration with SAGC for at least three (3) years.</li> </ul>	
	<b>1 x Professional Construction Project Manager</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 5 years' experience in Management and Administration of pavement and stormwater management projects</li> <li>Professional registration with SACPCMP or PMP at least three (3) years</li> </ul>	
Previous relevant company experience	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design of pavement/roads related projects.	
Financial ability to execute the contract. (three years (3) financial statements)	A Minimum Turn-Over of R 1 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).	
Company Registration	Company registered and in Operation for four (4) years, with a minimum turn-over of R 500 000 for the latest three (3) consecutive financial years.	

### REQUIRED DOCUMENTS:

Bidders are required submitting the following documents with their bids:

#### 1 x Professional Engineer/Technologist

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 10 years' experience in pavement design or stormwater management related projects, with more than 5 years' pavement design experience.
- Certified Copy of Professional registration with ECSA for at least five (5) years.

Contractor

Witness 1

Witness 2

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Witness 1

Witness 2

### 1 x Civil Engineer/Technologist

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- Minimum of 5 years' experience in pavement design or stormwater related projects, with more than 5 years' pavement design experience.

### 1x Professional Land Surveyor:

- Certified Copy of Bachelor's Degree in Land Survey
- CV demonstrating a minimum of 5 years' experience in land survey related projects.
- Certified Copy of Professional registration with SAGC for at least three (3) years.

### 1x Professional Construction Project Manager:

- Certified Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 5 years' experience in Management and Administration of pavement and stormwater management projects
- Certified Copy of SACPCMP or PMP certificate.

### Previous relevant company experience:

- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in pavement design projects.

### Financial Ability/Capacity

- Copy of three (3) year audited financial statements, the financial years measured relative to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act.

### Company Registration:

- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

**Failure to submit the above with the bid document will render the bid non-responsive**

### Please Note:

1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.
2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.
3. The Employer may appoint the same company for more than one discipline.
4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).

## 3. BUILDING WORKS

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
Staffing profile	<b>1 x Professional Architecture</b> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Architecture</li> <li>• Minimum of 5 years' experience in the Architectural design/practice of building related projects.</li> <li>• Professional registration with SACAP for at least three (3) years.</li> </ul>	

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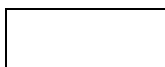
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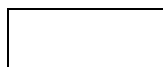
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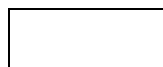
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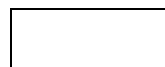


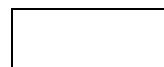
EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
	<b>1 x Professional Quantity Surveyor</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Quantity Survey</li> <li>Minimum of 5 years' experience in building related projects</li> <li>Professional registration with SACQSP for at least three (3) years.</li> </ul>	
	<b>1 x Professional Structural Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in building projects.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul>	
	<b>1 x Professional Mechanical Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related or similar mechanical Infrastructure.</li> <li>mechanical infrastructure Professional registration with ECSA for at least three (3) years.</li> </ul>	
	<b>1 x Professional Electrical Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related electrical infrastructure or similar Electrical infrastructure.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul>	
	<b>1 x Professional Construction Project Manager</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 3 years' experience in Management and Administration of Building Related Projects.</li> <li>Professional registration with SACPCMP or PMP for at least three (3) years.</li> </ul>	
<b>Previous relevant company experience</b>	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings	
<b>Financial ability to execute the contract. three years (3) financial statements)</b>	A Minimum Turn-Over of R 1 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).	
<b>Company Registration</b>	Company registered and in Operation for four (4) years, with a minimum turn-over of R 500 000 for the latest three (3) consecutive financial years.	

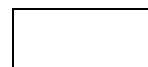
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2



## **REQUIRED DOCUMENTS:**

**Bidders are required submitting the following documents with their bids:**

### **1 x Professional Architecture**

- Certified Copy of Bachelor's Degree in Architecture
- Cv demonstrating Minimum of 5 years' experience in the Architectural design/practice of building related projects.
- Certified Copy of Professional registration with SACAP.

### **1 x Professional Quantity Surveyor**

- Certified Copy of Bachelor's Degree in Quantity Survey
- CV demonstrating minimum of 5 years' experience in building related projects
- Certified Copy of Professional registration with SACQSP.

### **1x Professional Structural Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in building infrastructure projects.
- Certified Copy of ECSA Professional registration certificate.

### **1x Professional Mechanical Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience building related mechanical infrastructure projects.
- Certified Copy of ECSA Professional registration certificate.

### **1x Professional Electrical Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in building related electrical infrastructure projects.
- Certified Copy of ECSA Professional registration certificate.

### **1x Professional Construction Project Manager:**

- Certified Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 5 years' experience in Management and Administration of Water and Sanitation Related Projects.
- Certified Copy of SACPCMP or PMP certificate.

### **Previous relevant company experience:**

- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings.

### **Financial Ability/Capacity**

- Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act.

### **Company Registration:**


- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

**Failure to submit the above with the bid document will render the bid non-responsive**

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

**Please Note:**

1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.
2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.
3. The Employer may appoint the same company for more than one discipline.
4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



PROJECT NO: ERW2211/02

**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS**

**T 2.1 LIST OF RETURNABLE DOCUMENTS**

1. Failure to fully complete and sign the relevant returnable documents shall render such a Tender offer unresponsive.
2. Bidders shall note that their signatures appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided, including the information provided by candidates proposed for the specified key positions.
3. Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a Bidder. If subsequently any information is found to be incorrect such discovery shall be taken as wilful misrepresentation by that Bidder to induce the contract. In such event the Employer has the discretionary right to terminate the contract.
4. **The Bidder must complete and sign the following returnable Schedules:**

**Failure to comply with these requirements will render the tender non-responsive.**

	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.	NB: To be completed by the Bidder: Fill in Yes or No if proof and/or documents are attached.	NB: For Office Use only: Fill in Yes or No if proof and/or document is attached
<b>MBD 1</b>	Invitation To Bid		
<b>MBD 2</b>	Tax Clearance Requirements		
<b>MBD 3.3</b>	Pricing Structure: Professional Services		
<b>MBD 4</b>	Declaration Of Interest		
<b>MBD 6.1</b>	Preference Schedule		
<b>MBD 7.2</b>	Contract Form: Services		
	Part 1: To Be Completed By The Bidder		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

	<b>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.</b>	<b>NB: To be completed by the Bidder: Fill in Yes or No if proof and/or documents are attached.</b>	<b>NB: For Office Use only: Fill in Yes or No if proof and/or document is attached</b>
	Part 2: To Be Completed By ERWAT		
<b>MBD 8</b>	Declaration Of Bidder's Past Supply Chain Management Practices		
<b>MBD 9</b>	Certificate Of Independent Bid Determination		
<b>FORM A</b>	MUNICIPAL SERVICES, RATES AND TAXES OR RENTAL AGREEMENT WITH LANDLORD: 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.  Rates and taxes must not be in arrears for longer than 90 (ninety) days of date of closing of bid.		
<b>FORM B</b>	National Treasury Centralised Supplier Database		
<b>FORM C</b>	Authority of signatory		
<b>FORM D</b>	Financial references /bidder's credit rating and bank details		
<b>FORM E</b>	Record of addenda to tender documents		
<b>FORM F</b>	Certificate of authority for signatory to agreement in terms of occupational health and safety act, 1993 (act no 85 of 1993)		
<b>FORM G</b>	Certified copy of id documents of owners/members/shareholders (see bidders information section).		
<b>FORM H</b>	Current certificate of good standing from compensation commissioner		
<b>FORM I</b>	Applicable Standards for the duration of the contract.		
<b>FORM J</b>	Letter of intent to submit third party liability insurance and all risk contractors insurance to cover this contract		
<b>FORM K</b>	Copy of company registration documents		
<b>FORM L</b>	Audited Financial Statements		
<b>FORM M</b>	Tendered Disciplines		
<b>FORM N</b>	Expertise of the Key Personnel		
<b>FORM O</b>	Company experience		
<b>FORM P</b>	Schedule of Consultancy Services provided to Organ of State		

Contractor

Witness 1

Witness 2

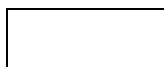
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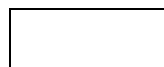
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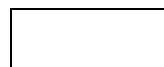
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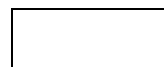
**Failure to submit with these documents will render the tender non-responsive.**

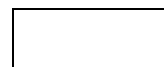
	<p><b><u>MINIMUM REQUIREMENTS</u></b></p> <p>As a Tender Evaluation Requirement, the Bidder shall be expected to submit the documents stipulated hereunder for the discipline that they are tendering for. Failure to submit the required documentation shall render the Bid non-responsive.</p> <p><b>1. WASTEWATER INFRASTRUCTURE</b></p> <p><b><u>REQUIRED DOCUMENTS:</u></b></p> <p><b>Bidders are required submitting the following documents with their bids:</b></p> <p><b>1xProfessional Structural Engineer:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>• CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.</li> <li>• Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1xProfessional Structural Technologist /Engineer:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>• CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.</li> <li>• Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1x Structural Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>• CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or any other design project of similar nature and complexity.</li> </ul> <p><b>1 x Professional Hydraulics Engineer:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>• CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>• Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Hydraulics Technologist/ Engineer:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>• CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>• Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1x Hydraulics Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> </ul>
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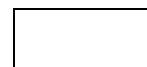
  
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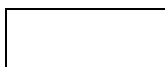
  
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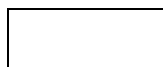
  
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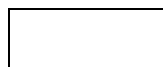
  
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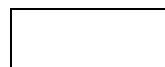
  
Witness 2

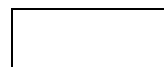
	<ul style="list-style-type: none"> <li>CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects.</li> </ul> <p><b>1 x Professional Geotechnical Engineer/Geologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering/Geotechnical engineering (BSC/BEng) or Geology</li> <li>CV demonstrating minimum of 10 years' experience in the geotechnical designs of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or liquid retaining structural projects, with more than 5 years' geotechnical design experience.</li> <li>Certified Copy of Professional registration with ECSA or SACNASP for at least five (5) years</li> </ul> <p><b>1 x Professional Process Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil/Chemical Engineering (BSC/BEng)</li> <li>CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1 x Professional Process Technologist/Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Certified Copy of ECSA Professional registration certificate.</li> </ul> <p><b>1x Process Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating Minimum of 5 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> </ul> <p><b>1 x Professional Mechanical Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Mechanical Engineering (BSC/BEng)</li> <li>CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.</li> <li>Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Mechanical Technology/Engineer:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.</li> <li>Certified Copy of Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Mechanical Engineer/Technologist:</b></p> <ul style="list-style-type: none"> <li>Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>CV demonstrating Minimum of 5 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> </ul>
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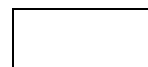
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

**1 x Professional Electrical Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.
- Certified Copy of ECSA Professional registration certificate

**1 x Professional Electrical Technologist/Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.
- Certified Copy of ECSA Professional registration certificate

**1x Professional Control and Instrumentation Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.
- Certified Copy of ECSA Professional registration certificate.

**1x Professional Control and Instrumentation Technologist/Engineer:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.
- Certified Copy of ECSA Professional registration certificate.

**1x Professional Construction Project Manager:**

- Certified Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 3 years' experience in Management and Administration of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure projects or any other construction project of similar nature and complexity.
- Certified Copy of SACPCMP or PMP certificate.

**Previous relevant company experience:**

- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction (ECSA stages 1 to 6) of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure for a minimum total of R 25 million per project (Total project value).

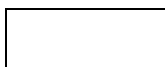
**Financial Ability/Capacity:**

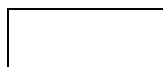
- Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act

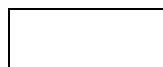
**Company Registration:**

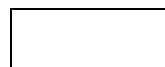
- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

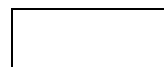
**Failure to submit the above with the bid document will render the bid non-responsive**

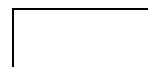
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

**Please Note:**

1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.
2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.
3. The Employer may appoint the same company for more than one discipline.
4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).

**2. ROADS AND STORMWATER MANAGEMENT**

**REQUIRED DOCUMENTS:**

**Bidders are required submitting the following documents with their bids:**

**1 x Professional Engineer/Technologist**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 10 years' experience in pavement design or stormwater management related projects, with more than 5 years' pavement design experience.
- Certified Copy of Professional registration with ECSA for at least five (5) years.

**1 x Civil Engineer/Technologist**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- Minimum of 5 years' experience in pavement design or stormwater related projects, with more than 5 years' pavement design experience.

**1x Professional Land Surveyor:**

- Certified Copy of Bachelor's Degree in Land Survey
- CV demonstrating a minimum of 5 years' experience in land survey related projects.
- Certified Copy of Professional registration with SAGC for at least three (3) years.

**1x Professional Construction Project Manager:**

- Certified Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 5 years' experience in Management and Administration of pavement and stormwater management projects
- Certified Copy of SACPCMP or PMP certificate.

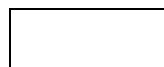
**Previous relevant company experience:**

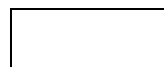
- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in pavement design projects.

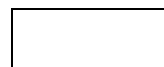
**Financial Ability/Capacity**

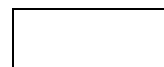
- Copy of three (3) year audited financial statements, the financial years measured relative to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act

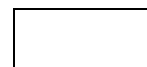
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2



**Company Registration:**

- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

**Failure to submit the above with the bid document will render the bid non-responsive**

**Please Note:**

1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.
2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.
3. The Employer may appoint the same company for more than one discipline.
4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).

**3. BUILDING WORKS**

**REQUIRED DOCUMENTS:**

**Bidders are required submitting the following documents with their bids:**

**1 x Professional Architecture**

- Certified Copy of Bachelor's Degree in Architecture
- Cv demonstrating Minimum of 5 years' experience in the Architectural design/practice of building related projects.
- Certified Copy of Professional registration with SACAP.

**1 x Professional Quantity Surveyor**

- Certified Copy of Bachelor's Degree in Quantity Survey
- CV demonstrating minimum of 5 years' experience in building related projects
- Certified Copy of Professional registration with SACQSP.

**1x Professional Structural Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in building infrastructure projects.
- Certified Copy of ECSA Professional registration certificate.

**1x Professional Mechanical Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience building related mechanical infrastructure projects.
- Certified Copy of ECSA Professional registration certificate.

**1x Professional Electrical Engineer/Technologist:**

- Certified Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in building related electrical infrastructure projects.
- Certified Copy of ECSA Professional registration certificate.

**1xProfessional Construction Project Manager:**

  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

	<ul style="list-style-type: none"> <li>• Certified Copy of Bachelor's Degree in the Built Environment</li> <li>• CV demonstrating a minimum of 5 years' experience in Management and Administration of Water and Sanitation Related Projects.</li> <li>• Certified Copy of SACPCMP or PMP certificate.</li> </ul> <p><b>Previous relevant company experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings</li> </ul> <p><b>Financial Ability/Capacity</b></p> <ul style="list-style-type: none"> <li>• Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act</li> </ul> <p><b>Company Registration:</b></p> <ul style="list-style-type: none"> <li>• Copy of Company Registration Documents (CIPC, Pty, CC, etc.)</li> </ul> <p><b>Failure to submit the above with the bid document will render the bid non-responsive</b></p> <p><b><u>Please Note:</u></b></p> <ol style="list-style-type: none"> <li>1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.</li> <li>2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.</li> <li>3. The Employer may appoint the same company for more than one discipline.</li> <li>4. All certificates and professional registration must be certified copies and the relevant portfolio of evidence completed and signed (FORM N).</li> </ol>
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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2





PROJECT NO: ERW2211/02


THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS


T2.2    RETURNABLE SCHEDULES


  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

MBD 1

### INVITATION TO BID

**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS.”**

**BID NUMBER: ERW2211/02**

**CLOSING DATE: 19 April 2023**

**TIME: 12:00**

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: ERW2211/02** and “**Contract Description: THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS** to be placed in Tender Box at ERWAT Head Office, Hartbeestfontein 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 will 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)**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**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*

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:							
ERWAT VENDOR NUMBER (NOT COMPULSORY):							
TOTAL BID PRICE/VALUE (INC. VAT) CARRIED OVER FROM BOQ/PRICING SCHEDULE:		R ALL <u>TENDERED RATES</u> INCLUDING VAT					
TOTAL NUMBER OF ITEMS OFFERED							
* <i>PREFERENCE POINTS CLAIMED AS PER FORM MBD6.1</i>		POINTS CLAIMED [ _____ ]					
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					
DISABLED [ _____%]		WOMEN [ _____%]      YOUTH [ _____%]					

NAME AND SURNAME: \_\_\_\_\_

SIGNATURE OF BIDDER: \_\_\_\_\_

CAPACITY UNDER WHICH THIS BID IS SIGNED: \_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_  
Contractor

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

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

\_\_\_\_\_  
Employer

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

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

**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: [publictender@erwat.co.za](mailto:publictender@erwat.co.za)

**TECHNICAL QUERIES MAY BE DIRECTED TO:**

CONTACT PERSON: Mr Jeffrey Mathunzi

CONTACT DETAILS: (TEL) 011 929 7000

E-MAIL: [jeffrey.mathunzi@erwat.co.za](mailto:jeffrey.mathunzi@erwat.co.za)

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**MBD 2**

**TAX CLEARANCE CERTIFICATE REQUIREMENTS**

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.

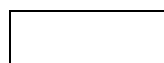
**THIRD PARTY AUTHORISATION TO VIEW BIDDER TCS:**

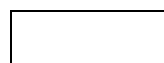
To assist with the evaluation process of your bid we require your consent to check your SARS tax compliance via e-filing. Kindly complete the table below authorising ERWAT to check TCC for tender purposes only.

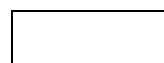
<b>TCS Details</b>	
<b>Tax payer name</b>	
<b>Trading Name</b>	
<b>Purpose of request</b>	TENDER
<b>Request Reference number</b>	
<b>PIN</b>	
<b>PIN EXPIRY DATE</b>	

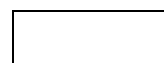
**Note: Bidders may attach their Tax compliance status printout to the bidding document.**

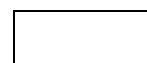
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

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

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*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*



MBD 3.3

**PRICING SCHEDULE  
(Professional Services)**

**OFFER TO BE VALID FOR 120 (ONE HUNDRED AND TWENTY) DAYS FROM THE CLOSING DATE OF BID**

1. The accompanying information must be used for the formulation of proposals.
2. Bidders are required to indicate a ceiling price based on the total estimated time for completion of all phases and including all expenses **inclusive of VAT** for the project. The Bid is a Framework Agreement that is Rate Based, the ceiling price and estimated time of completion are determined as-and-when scope is available according to the issued Instruction to Perform Work (IPW)
3. Persons who will be involved in the project and rates applicable (certified invoices must be rendered in terms hereof)

- |                               |   |                   |
|-------------------------------|---|-------------------|
| 4. <b>PERSON AND POSITION</b> | <b>HOURLY RATE</b>                                | <b>DAILY RATE</b> |
| <u>Refer C3.1.2</u>           | <u>Refer C2.2, Items 1-3, Activity 3 Schedule</u> |                   |

5. PHASES ACCORDING TO WHICH THE PROJECT WILL BE COMPLETED, COST PER PHASE AND MAN-DAYS TO BE SPENT:

This is a Framework Agreement; therefore, the Scope is only available on as-and-when instructed basis; the phases, cost per phase and man-days can only be available in the Instruction to Perform Work (IPW).

- 5.1. Travel expenses (specify, for example rate/km and total km, class of air travel, etc.). Only actual costs are recoverable. Proof of the expenses incurred must accompany certified invoices.

<b>DESCRIPTION OF EXPENSE TO BE INCURRED</b>	<b>RATE</b>	<b>QUANTITY</b>
--	-------------	-----------------

The Rates and Description of Expenses is given under C2.2, Item 1-3, Activity 4 Schedule; the quantities shall only be available on as-and-when instructed basis when the scope becomes available.

- 5.2. Other expenses, for example accommodation (specify, e.g. Three-star hotel, bed and breakfast, telephone cost, reproduction cost, etc.). On basis of these particulars, certified invoices will be checked for correctness. Proof of the expenses must accompany invoices.

<b>DESCRIPTION OF EXPENSE TO BE INCURRED</b>	<b>RATE</b>	<b>QUANTITY</b>
--	-------------	-----------------

The Rates and Description of Expenses is given under C2.2, Item 1-3, Activity 4 Schedule; the quantities shall only be available on as-and-when instructed basis when the scope becomes available.

6. Period required for commencement with project after acceptance of bid: as per issued IPW
7. Estimated man-days for completion of project: as per issued IPW
8. Are the rates quoted firm for the full period of contract? As per the provisions of C1.2 Contract Data
9. If not firm for the full period, provide details of the basis on which adjustments will be applied for, for example consumer price index: As per the provisions of C1.2 Contract Data

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: 

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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 / shareholder's members, their individual identity numbers and state employee numbers must be indicated in paragraph 5 below.

4.8 Are you presently in the service of the state?  
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.

\_\_\_\_\_

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.

\_\_\_\_\_

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

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

**YES / NO**

If so, furnish particulars.

---

---

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

**YES / NO**

If so, furnish particulars.

---

---

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

**YES / NO**

If so, furnish particulars.

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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.

---

---

---

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.

**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**

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

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

**1. GENERAL CONDITIONS**

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

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

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

a) The applicable preference point system for this tender is the 90/10 preference point system.

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	90
SPECIFIC GOALS	10
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. DEFINITIONS

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

## 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

### 3.1 POINTS AWARDED FOR PRICE

#### 3.1.1 THE 90/10 PREFERENCE POINT SYSTEM

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

## 4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

**Table 1: A maximum 10 points (90/10 preference points system), will be allocated for the specific goals indicated in the table below.**

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The specific goals allocated points in terms of this tender		Number of points allocated (90/10 system) (To be completed by the organ of state)
1	EME or QSE 51% owned by women	2
2	EME or QSE 51% owned by youth	2
3	EME or QSE 51% owned by people with disabilities	2
4	EME or QSE 51% owned by military veterans	2
5	EME or QSE within the boundaries of Ekurhuleni Municipality	2

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

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

#### EXAMPLE

##### Joint venture

Party 1 = 51% EME/QSE owned by women

Party 2 = 100% EME/QSE owned by women

= **151%** / 2 parties in the JV = 75% and will score = 2 points

The above principle will apply to points 1, 2, 3 & 4 indicated in Table 1 above.

For point 5: The collective JV agreement's address, or the Lead JV partners' domicile Address will be utilized for scoring of points.

#### DECLARATION WITH REGARD TO COMPANY/FIRM

4.2 Name of company/firm.....

4.3 Company registration number: .....

4.4 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]



Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

4.5 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.

**WITNESSES:**

1. \_\_\_\_\_

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

DATE: \_\_\_\_\_

<p>_____</p> <p><b>SIGNATURE(S) OF BIDDER(S)</b></p> <p><b>ADDRESS:</b> _____</p> <p>_____</p>
--

\_\_\_\_\_  
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. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
  - d. Been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Item	Question	Yes	No
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 *pe se* prohibition meaning that it cannot be justified under any grounds.
3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
  - a. take all reasonable steps to prevent such abuse;
  - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
  - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### **CERTIFICATE OF INDEPENDENT BID DETERMINATION**

I, the undersigned, in submitting the accompanying bid:

**BID ERW2211/02: THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS.**

in response to the invitation for the bid made by:

**EKURHULENI WATER CARE COMPANY (ERWAT)**

(Name of Municipality/Entity)

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

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

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
  - (a) has been requested to submit a bid in response to this bid invitation;
  - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
  - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium<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;

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (e) the submission of a bid which does not meet the specifications and conditions of the bid;  
or
  - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

\_\_\_\_\_  
**SIGNATURE**

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

\_\_\_\_\_  
**POSITION**

\_\_\_\_\_  
**NAME OF BIDDER**

\_\_\_\_\_

*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: _____		
Landlord's business stamp here (where applicable)		

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Contractor

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Witness 1

--

Witness 2

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Employer

--

Witness 1

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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**

*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

**FORM C**

**AUTHORITY OF SIGNATORY TO SIGN BIDS**

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

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

**Close Corporation:** A resolution by its members authorizing 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 authorized to sign on behalf of each partner, in which case proof of such authorization 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 authorized 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.

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



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

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"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 and 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' 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 Consulting 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:** \_\_\_\_\_

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*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

FORM G

**CERTIFIED COPY OF ID DOCUMENTS OF OWNERS/MEMBERS/SHAREHOLDERS**  
**SEE BIDDERS' INFORMATION SECTION)**

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM H

CURRENT CERTIFICATE OF GOOD STANDING FROM COMPENSATION COMMISSIONER

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM I

**APPLICABLE STANDARDS FOR THE DURATION OF THE CONTRACT**

The following standards shall be applicable for the implementation phase of the project.

SOUTH AFRICAN DESIGN STANDARDS	
SANS 10100	
SANS 10100-3	

**Note: The SANS standard used in this project are not limited to the two, all major engineering services/ tasks will/should be in line with the discipline SANS Standards.**

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



FORM J

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

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**FORM K**

**COPY OF COMPANY REGISTRATION DOCUMENTS**

1. **For Closed Corporations**

CK1 or CK2 or CK9 as applicable (Founding Statement).

2. **For Companies:**

- A letter from the auditors confirming shareholding percentages or
- A copy of the Certificate of Incorporation
- Certified Copies of the ID's of the Directors and
- The shareholders' register.

3. **For Joint Venture Agreements**

- 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.
- Copy of the Joint Venture Agreement between all the parties,
- As well as the documents in MBD 1, MBD 6.1, Form C and Form D of each Joint Venture member.

4. **For Partnership**

- Certified Copies of the ID's of the partners

5. **One-person Business / Sole trader/Sole Proprietor**

- Certified Copy of ID

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM L

AUDITED FINANCIAL STATEMENTS

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

FORM M

TENDERED DISCIPLINES

The bidder shall indicate the discipline(s) that they are tendering for, by marking (i.e., X or √) on the right column of the table below.

DISCIPLINES	MARK (i.e., X or √) TO INDICATE THE TENDERED DISCIPLINES
<b>Wastewater Infrastructure</b> [sewer pipelines, pump stations, concrete structures, WWCW upgrades, condition assessments, wastewater process units]	
<b>Roads and Stormwater Management</b> [paved roads, stormwater management designs, surveys, cadastral and servitudes]	
<b>Building Works</b> [office buildings, laboratory buildings]	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**FORM N**

**EXPERTISE OF THE KEY PERSONNEL/ COMPANY**

**(Note: Attach under Appendix on the proposal document and mark FORM N)**

1. **Required Documents for the Key staff Personnel / Individual adequacy:** The Required documents shall be as per the specifications given under **Clause F.2.1 of the Tender Data, Clause 5 of section T 2.1 and Clause C 3.1.2 of the Scope of Work.**
2. Bidders must complete the table given below or refer to the relevant appendix in the schedule of returnable documents.
3. **MBD 3.3** ; the tenderer shall state in the table below all the project personnel that will be available for this contract in line with MBD 3.3.
4. Certified Copies of all Qualifications and Professional Registration Documents must be submitted as support for portfolio of evidence.

**NB : Failure to provide information will lead to non-compliance and disqualification**

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*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*

1. PORTFOLIO OF EVIDENCE FOR WASTEWATER INFRASTRUCTURE

DESIGNATION	NAME	QUALIFICATION	PROFESSIONAL REGISTRATION		EXPERIENCE IN WASTEWATER/WATER TREATMENT OR BULK WATER/WASTEWATER RETAINING ENGINEERING PROJECTS (YEARS)	OVERALL EXPERIENCE IN THE ENGINEERING AND BUILT ENVIRONMENT (YEARS)
			PROFESSIONAL BODY	YEARS OF REGISTERED		
1 x Professional Structural Engineer	1.					
1 x Professional Structural Engineer or Technologist	1.					
1 x Structural Engineer or Technologist	1.					
1 x Professional Geotechnical Engineer or Geologist	1.					
1 x Professional Hydraulics Engineer	1.					
1 x Professional Hydraulics Engineer or Technologist	1.					

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DESIGNATION	NAME	QUALIFICATION	PROFESSIONAL REGISTRATION		EXPERIENCE IN WASTEWATER/WATER TREATMENT OR BULK WATER/WASTEWATER RETAINING ENGINEERING PROJECTS (YEARS)	OVERALL EXPERIENCE IN THE ENGINEERING AND BUILT ENVIRONMENT (YEARS)
			PROFESSIONAL BODY	YEARS OF REGISTERED		
1 x Hydraulics Engineer or Technologist	1.					
1 x Professional Process Engineer.	1.					
1 x Professional Process Engineer or Technologist	1.					
1 x Process Engineer or Technologist	1.					
1x Professional Mechanical Engineer	1.					
1 x Professional Process Engineer or Technologist	1.					
1 x Mechanical Engineer or Technologist	1.					
1 x Professional Electrical Engineer	1.					

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DESIGNATION	NAME	QUALIFICATION	PROFESSIONAL REGISTRATION		EXPERIENCE IN WASTEWATER/WATER TREATMENT OR BULK WATER/WASTEWATER RETAINING ENGINEERING PROJECTS (YEARS)	OVERALL EXPERIENCE IN THE ENGINEERING AND BUILT ENVIRONMENT (YEARS)
			PROFESSIONAL BODY	YEARS OF REGISTERED		
1 x Professional Electrical Engineer or Technologist	1.					
1 x Professional Control and Instrumentation Engineer	1.					
1 x Professional Control and Instrumentation Engineer or Technologist	1.					
1 x Professional Construction Project Manager	1.					

**SUMMARY OF REQUIRED DOCUMENTS:**

- CVs with contactable references
- Certified Copy of Qualification
- Certified Copy of Professional Registration Certificate

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**DECLARATION:**

I, \_\_\_\_\_, duly authorized to sign this declaration, hereby confirm/declare that the information submitted as portfolio of evidence in relation to key staff experience and qualifications is a true reflection of the submission.

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## 2. PORTFOLIO OF EVIDENCE FOR ROADS AND STORMWATER MANAGEMENT

DESIGNATION	NAME	QUALIFICATION	PROFESSIONAL REGISTRATION		EXPERIENCE IN PAVEMENT DESIGN AND CONSTRUCTION ENGINEERING PROJECTS (YEARS)	OVERALL EXPERIENCE IN THE ENGINEERING AND BUILT ENVIRONMENT (YEARS)
			PROFESSIONAL BODY	YEARS REGISTERED		
1 x Professional Civil Engineer or Technologist	1.					
1 x Civil Engineer/Technologist	1.					
1 x Professional Land Surveyor	1.					
1 x Professional Construction Project Manager	1.					

### SUMMARY OF REQUIRED DOCUMENTS:

- CVs with contactable references
- Certified Copy of Qualification
- Certified Copy of Professional Registration Certificate

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**DECLARATION:**

I, \_\_\_\_\_, duly authorized to sign this declaration, hereby confirm/declare that the information submitted as portfolio of evidence in relation to key staff experience and qualifications is a true reflection of the submission.

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### 3. PORTFOLIO OF EVIDENCE FOR BUILDING WORKS

DESIGNATION	NAME	QUALIFICATION	PROFESSIONAL REGISTRATION		EXPERIENCE IN THE DESIGN AND CONSTRUCTION OF BUILDING RELATED TREATMENT PROJECTS (YEARS)	OVERALL EXPERIENCE IN THE ENGINEERING AND BUILT ENVIRONMENT (YEARS)
			PROFESSIONAL BODY	YEARS REGISTERED		
1 x Professional Architecture	1.					
1 x Professional Quantity Surveyor	1.					
1 x Professional Structural Engineer or Technologist	1.					
1 x Professional Mechanical Engineer or Technologist	1.					
1 x Professional Electrical Engineer or Technologist	1.					
1 x Professional Construction Project Manager	1.					

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

**SUMMARY OF REQUIRED DOCUMENTS:**

- CVs with contactable references
- Certified Copy of Qualification
- Certified Copy of Professional Registration Certificate

**DECLARATION:**

I, \_\_\_\_\_, duly authorized to sign this declaration, hereby confirm/declare that the information submitted as portfolio of evidence in relation to key staff experience and qualifications is a true reflection of the submission.

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

FORM O

COMPANY EXPERIENCE

**Note: Attach completed project reference on client letterhead and certified with client stamp or client signature; or attach completion certificates under appendix on the proposal document and mark FORM O.**

DISCIPLINE	PROJECT DESCRIPTION	PROJECT VALUE	PROJECT STATUS
WASTEWATER INFRASTRUCTURE	1.		
	2.		
	3.		
	4.		
	5.		
	6.		
	7.		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DISCIPLINE	PROJECT DESCRIPTION	PROJECT VALUE	PROJECT STATUS
ROADS AND STORMWATER MANAGEMENT	1.		
	2.		
	3.		
	4.		
	5.		
	6.		
	7.		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

DISCIPLINE	PROJECT DESCRIPTION	PROJECT VALUE	PROJECT STATUS
BUILDING WORKS	1.		
	2.		
	3.		
	4.		
	5		
	6.		
	7.		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**FORM P**

**SCHEDULE OF CONSULTANCY SERVICES PROVIDED TO ORGANS OF STATE**

Bidders are required to complete this Form in terms of the Supply Chain Management Regulations issued in terms of clause 35(3) of the Municipal Finance Management Act of 2003, which states that bidders for consultancy services must furnish the municipality or municipal entity with particulars of:

- a. All consultancy services provided to an organ of state in the last five years; and
- b. Any similar consultancy services provided to an organ of state in the last five years.

Bidders shall furnish under **Part A** and **Part B** below, only the details of the contracts where they were directly contracted by the Organ of state to render consultancy services in the last five years. Bidders must not include consultancy services provided in terms of a sub-consultancy agreement.

Where contracts were awarded in the name of a joint venture and the bidder formed part of that joint venture, indicate in the column entitled "Project Description and Contract Number" that it was in joint venture and provide the name of the joint venture that contracted with the employer. In the column for the value of the contract for the service, record the value of the portion of the contract performed (or to be performed) by the bidder.

**NB:** The tables provided under **Part A** and **Part B** only allow for a limited number of projects to be documented, in the case where the space provided in the table is not sufficient, the bidder must attach all their information following the same format as given in the tables.

**PART A: CONSULTANCY SERVICES PROVIDED TO AN ORGAN OF STATE**

The following Consultancy Services were either commenced or completed in the last five years on behalf of an organ of state as our direct Employer.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

PROJECT DESCRIPTION AND CONTRACT NUMBER [Only Project Completed Within The Last Five Years]	NAME OF ORGAN OF STATE [i.e. National/Provincial Department, Public Entity, Municipality, Municipal Entity]	CONTRACT VALUE	PROJECT STATUS
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
17.			
18.			

---

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## PART B: SIMILAR CONSULTANCY SERVICES PROVIDED TO AN ORGAN OF STATE

The following Contracts recorded in **Part A**, provided consultancy services to an organ of state that are similar to those required in terms of the scope of work for the respective disciplines in this bid:

PROJECT DESCRIPTION AND CONTRACT NUMBER FOR SIMILAR CONSULTANCY SERVICES	
<b>WASTEWATER INFRASTRUCTURE PROJECTS</b>	
1.	
2.	
3.	
4.	
5	
<b>ROADS AND STORMWATER PROJECTS</b>	
1.	
2.	
3.	
4.	
5	
<b>BUILDING WORKS PROJECTS</b>	
1.	
2.	
3.	
4.	
5	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**PROJECT NO: ERW2211/02**

**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) 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 Performance Management System
- C1.4 ERWAT Indemnity
- C1.5 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

---

*Contractor*

*Witness 1*

*Witness 2*

*Employer*

*Witness 1*

*Witness 2*



**PROJECT NO: ERW2211/02**

**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE  
PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE  
WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER  
CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS**

**C1 AGREEMENTS AND CONTRACT DATA**

**Part C1: Agreements and Contract Data**

C1.1 Form of Offer and Acceptance  
MBD 7.2: Contract Form for rendering services

C1.2 Contract Data

C1.3 Performance Management System

C1.4 ERWAT Indemnity

C1.5 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: **ERW2211/02: THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS**

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

By the representative of the Bidder, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Bidder offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

### THE OFFERED TOTAL OF THE PRICES (INCLUSIVE OF VALUE ADDED TAX) IS:

Rates Tendered by the Service Provider for their respective tendered discipline(s) Rand (in words).

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document 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:

- Part C1 Agreements and Contract Data (which includes this Agreement)
- Part C2 Pricing Data
- Part C3 Scope of Work
- Part C4 Site information

And drawings and documents or parts thereof, which may be incorporated by reference into 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 Employer .....  
(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 Employer .....  
(Name and address of organisation)

Name & Signature

Of Witness .....  
Name Date

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

## CONTRACT FORM: RENDERING OF SERVICES

MBD7.2

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

### PART 1 (TO BE FILLED IN BY THE BIDDER)

1. I hereby undertake to render services described in the attached bidding documents to (name of the institution)  
  
**ERWAT** in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number **ERW2211/02** at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
  - (i) Bidding documents, viz
    - Invitation to bid;
    - Pricing schedule(s);
    - Technical Specification(s);
    - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2022;
    - Declaration of interest;
    - Declaration of bidder's past SCM practices;
    - Certificate of Independent Bid Determination;
    - Special Conditions of Contract;
  - (ii) General Conditions of Contract
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

**NAME (PRINT)** \_\_\_\_\_

**CAPACITY** \_\_\_\_\_

**SIGNATURE** \_\_\_\_\_

**NAME OF FIRM** \_\_\_\_\_

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

#### WITNESSES

1 \_\_\_\_\_

2 \_\_\_\_\_

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

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

MBD7.2

**CONTRACT FORM: RENDERING OF SERVICES**

**PART 2 (TO BE FILLED IN BY THE ERWAT REPRESENTATIVE)**

1. I \_\_\_\_\_ in my capacity as \_\_\_\_\_ accept your bid under reference number:

ERW2211/02 dated \_\_\_\_\_ for the rendering of services indicated hereunder and/or further specified in the annexure(s).

2. An official order indicating service delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	PREFERENTIAL POINTS CLAIMED	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)
<i>Kindly refer to the pricing schedule/BOQ</i>				

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

NAME (PRINT) \_\_\_\_\_

CAPACITY \_\_\_\_\_

SIGNATURE \_\_\_\_\_

NAME OF FIRM \_\_\_\_\_

DATE \_\_\_\_\_

**WITNESSES**

1. \_\_\_\_\_

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

DATE: \_\_\_\_\_

\_\_\_\_\_  
Contractor

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

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

\_\_\_\_\_  
Employer

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

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

## C1.2 CONTRACT DATA

### C 1.2.1 GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the “**Standard Professional Services Contract (Third Edition, 3<sup>rd</sup> edition of CIDB document 1015 of September 2009)** published by the Construction Industry Development Board.

Copies of this Services Contract may be obtained from the Construction Industry Development Board's website [www.cidb.org.za](http://www.cidb.org.za).

### C 1.2.2 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, supplement or supersede, as the case may be, the General Conditions of Contract to the extent specified below, and shall take precedence and shall govern.

#### C1.2.2.1 (SCC)

It should be noted as a special condition to Clause C1.2.1, that in the event where the complexity of the works requires the use of a different Standard Professional Services Contract or amendments in the currently stipulated conditions of contract, ERWAT shall on a negotiated basis with the relevant service provider(s) amend the contract data or replace the current Standard Professional Services Contract (third Edition, 3<sup>rd</sup> edition of CIDB documents 1015 of September 2009) to suit the needs of the associated Scope of Works.

#### C1.2.2.2 (SCC)

The Special Conditions of Contract are supplementary to that of the General Conditions of Contract. It should be noted as a special condition that all ERWAT contracts are subject to the Municipal Financial Management Act (MFMA Act No 56 of 2003), therefore in the event where there is any contradiction between the MFMA (Act 56 of 2003) and the GCC or any other applicable contractual agreement, the MFMA (Act 56 of 2003) and its applicable regulations shall take precedence.

### C1.2.3 PART 1: DATA PROVIDED BY THE EMPLOYER

Clause	
1	The Employer is <b>Ekurhuleni Water Care Company (ERWAT)</b> .
3.4 and 4.3.2	<p><b>The Authorised and Designated representative of the Employer is:</b></p> <p>Name: _____</p> <p>E-mail: _____</p> <p>Tel: 011 929 7000</p> <p><b>The Employer's address for receipt of communications is:</b></p> <p>Ekurhuleni Water Care Company (ERWAT) Hartebeestfontein Office Park R25 (Bapsfontein/Bronkhorstspuit Road) Kempton Park Telephone: 011 929 7000</p>

Contractor

Witness 1

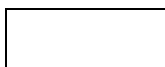
Witness 2

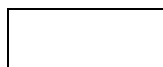
Employer

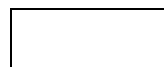
Witness 1

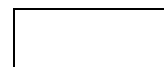
Witness 2

Clause	
1	<p><b>Contract:</b></p> <p>The Professional Services Agreement applicable to this contract shall be the Standard Professional Services Contract (third Edition, 3<sup>rd</sup> edition of CIDB documents 1015 of September 2009). It should be noted as a special condition of contract, that in the event where the nature or complexity of the works requires the use of a different Standard Professional Services Contract or amendments to the current contract data, ERWAT shall on a negotiated basis with the relevant service provider(s) amend the contract data or replace the current Standard Professional Services Contract (third Edition, 3<sup>rd</sup> edition of CIDB documents 1015 of September 2009) to suit the needs of the associated Instruction to Perform Work (IPW).</p> <p>The Professional Services Agreement, Service level agreement (where applicable), Bid document and related attachments shall constitute the sole agreement as per the provisions of clause 3.10.</p>
1	<p><b>Contract Price:</b></p> <p>This Contract is a Framework Agreement, and as such the contract shall have a Zero-Contract Price attached to it when awarded and when concluded. The Employer shall release Work Orders on an as-instructed basis in terms of clause 4.8 of this contract data, the Employer does not commit itself to offer the Service Provider any minimum or maximum quantum of work during the term of the Framework Agreement.</p>
1	<p><b>Project:</b></p> <p>The project is, <b>The Appointment Of As And When Required Professional Service Providers, To Render Services As Engineering Consultants To The Wastewater Infrastructure Projects At The Ekurhuleni Water Care Company, For A Period Of 36 Months:</b></p>
1	<p><b>Period of Performance:</b></p> <p>The Period of Performance (i.e., work allocation) is only for 36 months, from the date that the Contract is in effect. Work Orders/Instruction to perform work may be completed even if the completion date of the order is after the expiry of the term of the framework agreement; however, No Work Orders/Instruction to perform work may be issued after the expiry of term of the framework agreement. The service provider shall be required to complete all Work Orders issued subject to the Employer's objectives.</p>
1	<p><b>Add to Clause 1:</b></p> <p><b>Effective date:</b> The Framework Agreement shall commence on the last signature date of the Service Level Agreement.</p>
1	<p><b>Start date:</b></p> <p>The Start Date shall be the date when the Service Provider receives his formal copy of the signed Contract from the Employer.</p>

  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

Clause	
3.5	<p><b>Location:</b></p> <p>The services shall be performed at such locations as specified in Part C4 Site information, and all other locations that the employer may approve during the contract.</p>
3.9.	<p><b>Changes to the Contract Price or Period of Performance:</b></p> <p>Add to Clause 3.9.3:</p> <p>The time-based fees used to determine changes to the Contract Price are as stated in the Pricing data.</p>
3.12.	<p><b>Penalties:</b></p> <p>Add to Clause 3.12.1:</p> <p>The Service Provider shall note that his service provision forms an integral part of the total service delivery scope of the Employer, and that any delay or non-provision or negligent provision thereof may seriously affect the provision of the other related-services and contracts. Therefore, in keeping with the provisions of this clause, the penalty that the employer is entitled to levy for failing to deliver any part or the total service correctly and timeously shall be the greater of R 1000.00 per day or the Rand value equal to the actual losses incurred on other related services/contracts, subject to a maximum of 10% (ten) of the value of the Works Order/Instruction to perform work (IPW) per offence, after which the Employer reserves the right to resort to the provisions of Clause 3.12.1 as its remedial measures.</p> <p>Add to Clause 3.12.2 (a):</p> <p>The Employer may terminate the Contract or the Works Order/Instruction to Perform Work (IPW).</p>
3.15	<p><b>Programme</b></p> <p>Add to Clause 3.15.1:</p> <p>The Programme(s) for the performance of services per Works Order/Instruction shall be submitted within 14 days of the receipt of such Works Order or Instruction. The programme(s) shall be provided and maintained by the Service Provider per individual project issued through an individual Works Order or Instruction to Perform Work (IPW).</p> <p>Add to clause 3.15.3:</p> <p>For each Works Oder or Instruction to Perform Work (IPW), the Service Provider shall update the programme on a monthly basis or otherwise instructed by the Employer.</p>
3.16	<p><b>Adjustments</b></p> <p>Prices shall be <b>FIXED</b> and <b>FIRM</b> for the first 12 months of the <b>Contract</b>. <b>Price increments will be based on CPI annually on the anniversary of the starting date of the contract (tender award date).</b></p>
4.3	<p><b>Assistance:</b></p> <p>Replace Clause 4.3.1 (d) with the following:</p> <p>The Service Provider shall assist in the obtaining of all approvals, licenses from state, regional, and municipal authorities having jurisdiction over the Project, unless otherwise instructed by the Employer to act on the Employer's behalf in line with Clause 4.6.</p> <p>Replace Clause 4.3.2 with the following:</p>

Contractor

Witness 1


Witness 2


Employer


Witness 1


Witness 2


Clause	
	The authorized and designated person named in the Contract Data has complete authority in giving instruction and receiving communication on the Employer's behalf and interpreting and defining the Employer's policies and requirements in regard to the overall contract; however, for each Works Order/Instruction to Perform Work (IPW) issued, the Employer shall communicate particulars of the personnel responsible for giving instructions, receiving communications and general management of the works.
4.4	<p><b>Services of Others:</b> Add to Clause 4.4:</p> <p>Unless otherwise communicated to the service provider in writing, the Service Provider shall assume the responsibilities of clause 4.4 and appoint according to contract such others as may be required for the execution of work not included in the services, but which is necessary for the completion of the Works Order/Instruction to Perform Work (IPW). The Employer shall compensate the Service Provider for such works undertaken by its subcontractors (sub-consultants).</p>
4.8	<p><b>Add New Clause, Clause 4.8:</b> Terms for Issuing of Work Orders/Instruction to Perform Work (IPW):</p> <p>The Service Provider acknowledges that it is the objective of the Employer to create a Framework agreement for Professional Engineering Services for the Contract Period of Performance (i.e., 36 months) to ensure that as-and-when the Employer requires services scoped as per this contract; the Service Provider is in position, without delay, to render such services. Thus, to this end:</p> <ul style="list-style-type: none"> <li>a) The Employer does not guarantee a minimum or maximum expected quantum of work/services or fee value of work/services other than that which may be formally issued and accepted by the Services Provider during the term of the framework agreement.</li> <li>b) The Framework agreement may not bind the Employer to only make use of the agreement to meet the needs of the organisation.</li> <li>c) The Employer shall reserve the right to allocate purchase orders to more than one service provider depending on the nature of the assignment.</li> <li>d) When the framework agreement is concluded, it has a zero value or specified volumes of works/services, and the Employer shall have no obligation to pay the Service Provider appointed to the framework agreement.</li> </ul>
4.9	<p><b>Add New Clause, Clause 4.9:</b> Selection of Service Providers for Work Orders/Instruction to Perform Work (IPW):</p> <p>Work Orders from a framework agreement with a number of Service Providers covering the same scope of work may be made with and without requiring competition amongst the framework Service Providers. Therefore, as is the case of this framework agreement, non-competition and competition shall follow the following terms:</p> <p><b>1. Clause 4.9.1:</b> for the scope of work where the prices, fees and expenses have been adequately provided, the selection of service providers shall be conducted without competition and based on the following terms:</p> <ul style="list-style-type: none"> <li>a) For all works that are considered to be associated with low to moderate inherent risks in the opinion of the employer, selection of service providers from the panel shall be mainly conducted on a rotational basis.</li> </ul>


  
Contractor

  
Witness 1

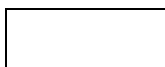
  
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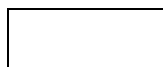
  
Employer

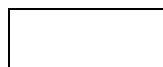
  
Witness 1

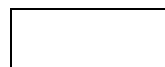
  
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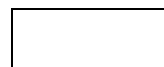
Clause							
	<p>b) For works that significantly warrant risk concerns, the employer shall reserve the right to invite the Service Provider(s) who in their opinion is most suitable to provide the work in the best interest of the Employer. Factors such as largely identical previous experience in the works/service being instructed, specialist expertise, financial models, etc shall influence such decisions.</p> <p>c) The value of the batch, task or package order is less than the threshold for the quotation procedure.</p>						
	<p><b>2. Clause 4.9.2:</b> Competition in the Framework contract shall be opened, and contractors invited to submit quotations to provide work/services in terms of the Works Order in the cases where:</p> <p>a) The terms of the framework contract require modification, or</p> <p>b) The terms in the framework agreement are insufficiently precise or complete to cover the requirements of the Works Order (e.g., Time based Fees); or</p> <p>c) The competitive process will provide a better quality of service and good value for money.</p> <p>d) There is no advantage or justifiable reason for issuing a Works Order to a particular Framework Service Provider.</p>						
5.4., 13.4 and 13.5	<p><b>Liability of the Service Provider</b></p> <p>The Service Provider is required to provide the following insurance (And Proof):</p> <table> <tr> <td>Insurance against</td><td>Risk in performing professional services (Professional Indemnity cover) and Public Liability insurance.</td></tr> <tr> <td>Limit of compensation</td><td> <p>(i) For Professional Indemnity Insurance, to an amount equal to twice the amount of fees payable to the Service Provider under the Works Order, excluding the reimbursement and expenses for items other than salaries of Personnel; or for a minimum of R 10 000 000, whichever is higher.</p> <p>(ii) Minimum R 5 000 000 per occasion for public liability insurance.</p> </td></tr> <tr> <td>Duration of liability.</td><td>For a period of 3 years from the date of completion of the Works Order.</td></tr> </table>	Insurance against	Risk in performing professional services (Professional Indemnity cover) and Public Liability insurance.	Limit of compensation	<p>(i) For Professional Indemnity Insurance, to an amount equal to twice the amount of fees payable to the Service Provider under the Works Order, excluding the reimbursement and expenses for items other than salaries of Personnel; or for a minimum of R 10 000 000, whichever is higher.</p> <p>(ii) Minimum R 5 000 000 per occasion for public liability insurance.</p>	Duration of liability.	For a period of 3 years from the date of completion of the Works Order.
Insurance against	Risk in performing professional services (Professional Indemnity cover) and Public Liability insurance.						
Limit of compensation	<p>(i) For Professional Indemnity Insurance, to an amount equal to twice the amount of fees payable to the Service Provider under the Works Order, excluding the reimbursement and expenses for items other than salaries of Personnel; or for a minimum of R 10 000 000, whichever is higher.</p> <p>(ii) Minimum R 5 000 000 per occasion for public liability insurance.</p>						
Duration of liability.	For a period of 3 years from the date of completion of the Works Order.						
5.4.3	<p><b>Add New Clause, Clause 5.4.3: Retention:</b></p> <p>A Performance Fee of 10% shall be deducted from all payment invoices or certificates, on the fee portion only (i.e. thus excluding ONLY expenses and costs). The Performance Fee shall be released to the Service Provider, on conclusion of the performance assessment of the services rendered on the specific Works Order, and approval of the Close Out Report.</p>						
5.5(c)	<p><b>Service Provider's actions requiring Employer's prior approval:</b></p> <p>The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions:</p> <p>Removing Key Persons, whose participation has been approved at tender stage or thereafter, from the Project or its issued Works Order(s). Changes and/or alterations made to 'issued for construction documentation' (drawings or schedules or instructions by the designer) where only construction supervision and/or monitoring services is provided by the Service Provider, i.e. design is executed by the Employer or another</p>						

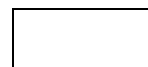
  
Contractor

  
Witness 1

  
Witness 2

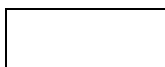
  
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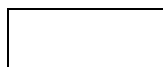
  
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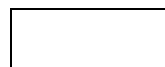
  
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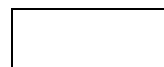


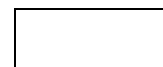
Clause	
	party contracted by the Employer. Changes and/or alterations made to 'issued for construction documentation' that has significant financial implications.
7.1	<p><b>Service Provider's Personnel</b> Add to Clause 7.1.1</p> <p>The Service Provider shall provide all the qualified and experienced personnel as per the requirements of part C3.1.2 of the Scope of Works.</p> <p>Add to Clause 7.1.5</p> <p>As per the provisions of clause 7.1.5, the Service Provider shall note the ERWAT safety requirement, that, all personnel accessing the Water Care Works shall be required to wear full PPE.</p>
8.1	<p><b>Commencement of Services</b></p> <p>The Service Provider is to commence the performance of the Service within 7 days of the date of the Employer accepting the Service Provider's fees, programme, resource schedule, and resource organogram for any Works Order(s) issued to him.</p>
8.2	<p><b>Completion</b></p> <p>Add to Clause 8.2.1</p> <p>The Completion/Period of Performance of all Works Orders issued before the expiry of the Framework Agreement shall be subject to clause 8.2.1; and the contract shall be deemed complete on the date of expiry of the defect's liability period, which is one calendar month after issue of the certificate of final completion. However, the Service Provider may not be issued nor accept New Works Orders after the expiry of the Framework agreement. Should the Service Provider accept and commence with a New Works Orders in this instance, he shall not be entitled to any remuneration for services rendered as per the applicable Works Order(s) nor shall the Employer be entitled to the usage or copyright of such rendered services.</p>
8.4.	<p><b>Termination</b></p> <p><b>Add New Clause, Clause 8.4.1 (f)</b></p> <p>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.</p> <p><b>Add to Clause 8.4.3 (c)</b></p> <p>Unless agreed in writing between the Employer and Service Provider, the period of suspension under clause 8.5.1 shall not exceed 12 months</p>
9.1	<p><b>Ownership of documents and Copyright:</b> Add to clause: Unless otherwise agreed by the Employer, Copyright of documents prepared by the Service Provider relating to the Project/Works Oder(s) is vested with Ekurhuleni Water Care Company (ERWAT).</p>
11.1	<b>Subcontracting:</b>

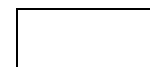
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

Clause	
	<p>Add to Clause:</p> <p>Depending on the Works Order/Project the Employer may with written consent permit the Service Provider to subcontract a percentage of works that the service provider has the skill and competency to perform.</p>
13	<p><b>Liability of the Service Provider</b></p> <p>Add new clause 13.1.4</p> <p>The Service Provider acknowledges that the approvals of drawings and reports by the Employer does not change the Service Provider's responsibility to provide the Services, nor does it indemnify the Service Provider from any negligence and/or omissions.</p>
15	The Interest shall be determined by the applicable law.

#### C 1.2.4 PART 2: DATA PROVIDED BY THE CONTRACTOR

Clause		
1	<b>Service provider</b>	
	The name of the Service Provider is:	
	Address:	
	Telephone:	
	Facsimile:	
5.3	<b>The authorised and designated representative of the Service Provider</b>	
	Name:	
	The Service Provider address for receipt of communications is	
	Physical address:	Postal address:
	Telephone:	
	Fax:	
	E-mail:	

#### C1.3 PERFORMANCE MANAGEMENT SYSTEM

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

The Municipal Finance Management Act (No. 56 of 2003) Section 116 (2) (d) determines that a Municipality must enter into a Performance Management System (PMS) with all service providers.

A draft PMS has been included (***See “Draft Performance Management”***), however the final document will be concluded with the appointed bidder and the costing for this project will run from the **2022/2023 until 2025/2026 financial years.**

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### **ACCEPTANCE OF PMS AGREEMENT**

**You are hereby requested to sign this document as acceptance of the agreement.**

#### **CONTRACTOR**

Signature : \_\_\_\_\_

Name : \_\_\_\_\_

Designation : \_\_\_\_\_

Date : \_\_\_\_\_

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#### **EKURHULENI WATER CARE COMPANY**

Signature : \_\_\_\_\_

Name : **MR. K CHIHOTA**

Designation : **MANAGING DIRECTOR**

Date : \_\_\_\_\_

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

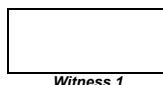
## C1.4 ERWAT INDEMNITY

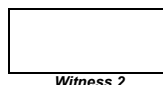
1. The Contractor hereby agrees to indemnify, hold harmless and defend ERWAT and their officers, employees, agents and representatives, from and against the following liabilities arising as a result of the execution of the work:
  - 1.1 Any liability with regard to claims by governmental authorities or others for non-compliance by Contractor of any Act of Parliament, law, ordinance, regulation or by-law made by a lawful authority provided that such compliance therewith was required for the execution of the Contract or at Law.
  - 1.2 Any liability arising from actual or alleged public or private nuisance arising out of negligent acts or omissions to act of Contractor or its Subcontractors, or of their employees.
  - 1.3 Any liability arising from loss or damage to Contractor and/or Subcontractor's equipment and their other property on site.
  - 1.4 Any liability arising from claims with regard to the death of/or injury or sickness or disease to Contractor' employees or the death of/or injury or sickness or disease to third parties.
  - 1.5 Any liability arising from any loss of/or damage to property belonging to a third party.
  - 1.6 Any liability arising from actual or asserted infringement or improper appropriation or use of patents, copyrights, proprietary information or know- how in respect of the work designed by/or under the responsibility of the Contractor.
  - 1.7 Any liability arising from the death or injury or loss or damage to property of third parties or ERWAT's property as a result of the negligent acts or omissions of contractors or its subcontractor's employees.
  - 1.8 Contractor shall indemnify ERWAT against all claims, proceedings, damages and costs of whatsoever nature arising out of contravention of environmental legislation.

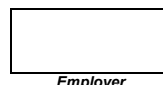
I, \_\_\_\_\_ the undersigned (duly authorised to sign) hereby declare that I have read and understood the abovementioned and agree to all the above.

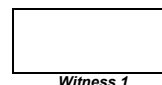
<b>COMPANY:</b>	
<b>ADDRESS:</b>	
<b>TEL:</b>	
<b>CELL:</b>	
<b>DATE:</b>	
<b>SIGNATURE:</b>	

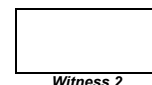
  
Contractor

  
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.
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: \_\_\_\_\_

\_\_\_\_\_  
Contractor

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

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

\_\_\_\_\_  
Employer

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

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



**PROJECT NO: ERW2211/02**

**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) 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: ERW2211/02


**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS**


**C2.1 PRICING INSTRUCTIONS**


1. The services to be provided will follow the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act , 2000 (Act No. 46 of 200) Board Notice 138 of 2015 Government Gazette No. 39480, dated 4 December 2015 by Engineering Council of South Africa [ECSA guidelines]; the Municipal Financial Management Act [MFMA, Act No. 56 of 2003]; Occupational Health and Safety Act, 1993 (Act No.85 of 1993) [OHS]; National Environmental Management Act, 1998 (Act No.107 of 1998) [NEMA]; SANS 1936:2012 Development of dolomite land (Parts 1, 2, 3 and 4) and the Supply Chain Management Regulations shall be read in conjunction with the Bill of Quantities.
2. The Pricing Schedule is composed of Financial Parameters (rates and sums) and Indicative Quantities, the Financial Parameters shall be applied over the term of the Framework Agreement while the Indicative Quantities shall be solely used to reduce the Tendered Financial Parameters to a Common Base/Indicative Total Price so that the tenders can be compared on a Comparative Basis. Bidders shall note that the Indicative Total Price or Indicative Prices cannot be used as the Offered Contract Price for the Framework Agreement, rather the Framework Contract shall have no Price attached at the point of award as is applicable to Framework Agreements in terms of the National Treasury documents for **Infrastructure Procurement and Delivery Management (IPDM)**.
3. **For the purposes of this Pricing Schedule, 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.
Indicative Quantity	:	The assumed number of units of work for each item that is based on the employer's project model, and not contractually binding, to be solely used to reduce Tendered Financial Parameters into a common base for evaluation purposes.
Rate	:	The payment per unit of work at which the Tenderer Tenders to do the work.
Indicative Amount	:	The indicative quantity of an item multiplied by the tendered rate of the (same) item to produce an amount that is not contractually binding but rather regarded as a common base amount that will be used to compare the tenders on comparative basis.


  
Contractor

  
Witness 1

  
Witness 2

  
Employer

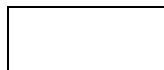
  
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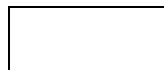
  
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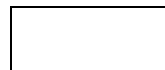
Indicative Contract Amount	:	The assumed contract amount, not contractually binding, used for the purposes of estimating the <b>Fees Based on Cost of the Works</b> as per the provisions of <b>ECSA Clause 4.3</b> .
Indicative Total	:	The sum of indicative amounts, and not contractually binding, to be solely used for evaluation purposes as common base amount to compare the tenders on a comparative basis.
Sum [Sum Per Order]	:	An amount tendered for an item, the extent of which is described in the Pricing Schedule, the Specifications or elsewhere, but of which the quantity of work is not measured in units

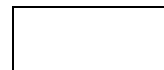
4. The Bidder shall Tender his Financial Parameters with the understanding that there is no commitment made by the employer to the bidder regarding the minimum or maximum quantum of work that will be instructed during the term of the contract.
5. The Tendered Financial Parameters (i.e., rates and sums) shall be used by the Employer as the basis for determining the cost of works for each Works Order/IPW once the scope of works becomes available. The engineering work is sometimes associated with certain complexities which may require engineering effort that cannot be adequately anticipated; therefore, in the cases where the financial parameters for rendering engineering services are not defined or could not be comprehensively defined, the bidders shall be invited to submit quotations on negotiated basis or on a competitive basis.
6. The Financial Parameters (i.e., rates and sums) inserted in the Pricing Schedules are deemed to include for all expenses, costs, profits, taxes (including value-added tax), general obligations and liabilities necessary to carry out the professional services described in the various documents.
7. The Quantities set out in the Pricing Schedule are only indicative quantities. The quantities of work finally accepted and certified for payment under each issued Works Order/IPW, and not the quantities given in the pricing schedule, will be used to determine payments.
8. The Indicative Quantities and Amounts shall be applicable per Works Order or IPW issued and should not be deemed to be the Total Indicative Costs and Quantities for the entire Framework Contract.
9. The Pricing Schedule shall be read in conjunction with the specifications given under **Part C3: Scope of Works**, the Financial Parameters (i.e., rates and sums) inserted against the items shall be deemed to cover the specifications required for that item as described under C3: Scope of Works.
10. Bidders may opt to submit a bid for anyone of the disciplines and submit a discipline specific organogram for each of the disciplines.
11. The evaluation of bids and point scoring will be done per individual Discipline.
12. The Pricing Schedule is Discipline Specific (Discipline Specific Organogram to be submitted), and each discipline is composed of Four (4) Types of Activities, the following shall apply:
  - 12.1. The Three (3) Disciplines are as follows:
    - 12.1.1. Wastewater Infrastructure
    - 12.1.2. Roads and Stormwater management
    - 12.1.3. Building Works
  - 12.2. The Four (4) Types of Activities under each Discipline are as given below, the Activities must be completed to the satisfaction of ERWAT and invoiced on completion and written approval.

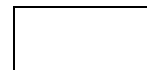
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

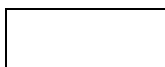
  
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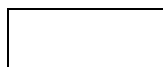
  
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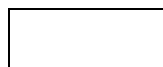


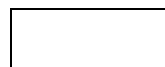
- 12.2.1. Activity 1 – Normal Services refer to ECSA clause 3.2.  
12.2.2. Activity 2 – Additional Services refer to ECSA clause 3.3.  
12.2.3. Activity 3 – Time Based refer to clause to ECSA clause 4.2.  
12.2.4. Activity 4 – Expenses and Costs refer to clause ECSA clause 4.6.
- 12.3. The specialist consultants under “**Clause C 3.1.3 of the scope of work**”, shall not be required often enough to be considered a fair representation of the items that should constitute the indicative Total Price in the bid. Therefore, the specialist consultants shall not form part of the Financial Parameters during the bidding stage. The successful bidders shall be required to provide quotations on as and when required basis.
- 12.4. The services to be provided by the specialist consultants shall be expected to follow the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of that relevant Profession Act, and latest Government Gazette.
13. Amounts due to the Consulting Engineer shall be paid by the employer within thirty (30) days of receipt by him/her of correct or corrected relevant invoices.
14. Payment for items under **Activity 2: Additional Services** shall occur as follows:
- 14.1. Taking Over of Designs Done by other Consulting Engineers
- The Consulting Engineer will be required to submit a time and cost-based fee for the review of Design Reports, Drawings and Specifications prepared by other Consulting Engineers in line with rates tendered for under Activity 3. The fee is to be inclusive of all cost involved in taking over the said documents.
  - Payment arrangement for the remaining stages of the affected project will be stated on the IPW as per Activities 1, Activity 2, Activity 3 and Activity 4.
- 14.2. The bidders' fees for conducting Dolomite Stability Investigations must cover all costs required for the review and approval by an independent Competence Level 4 Geo-professional as per SANS 1936-1:2012.
- 14.3. Dolomite Stability Investigation, Geotechnical Investigation and Occupational Health and Safety Specification shall be:
- 70% - payable on completion and submission of reports
  - 30% - payable on approval of the reports
- 14.4. Line Survey and Topographical Survey shall be:
- 70% - payable on completion and submission of reports
  - 30% - payable on approval of the reports
- 14.5. Water Use License Application and General Authorization shall be:
- 50% - payable on submission of all technical documentation (Phase 3) for WUL
  - 50% - payable on obtaining the permit for WUL
  - 100% - payable on obtaining the permit for GA
- 14.6. Environmental Authorizations shall be:
- 20% - payable on submission of Draft BAR/Scoping Report
  - 30% - payable on submission of Final BAR/Scoping Report
  - 50% - payable on issuing of RoD/Environmental Authorization
- 14.7. Other Additional Services listed under Activity 2 shall be:

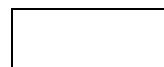
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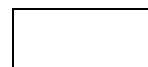
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

- 70% - payable on completion and submission of reports
  - 30% - payable on approval of the reports
- 14.8. For Provisional Sum for Other Specialist Services, the Consulting Engineer must obtain a minimum of three quotations to be approved in writing by the relevant ERWAT Project Manager before proceeding with Other Specialist Service, and shall be:
- 70% - payable on completion and submission of reports
  - 30% - payable on approval of the reports
15. **NB: Provisional Sums:** All handling costs for provisional sums shall be limited to a maximum of **5%**, should the Service Provider tender a rate that is above the maximum, then their bid will be **automatically disqualified**.
16. **NB:** The Consulting Engineer will be responsible for paying its sub-consultants' fees and expenses. The Principal Consultant/Consulting Engineer may claim payment from the employer for its sub-consultants' fees after completion of the work. All additional services reports must in all instances be prepared by specialist sub-consultant.
17. The employer reserves the right, by giving written notice to the Principal Consultant/Consulting Engineer, to stop the progress of a particular project/stage at any time due to poor performance or any other reason given by the employer. Should the employer exercise this right, the employer will pay the Principal Consultant/Consulting Engineer for work done and expenses incurred only up to the time that the notice was given.

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Contractor

Witness 1

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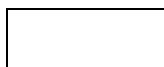
**PROJECT NO: ERW2211/02**

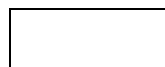
**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS**

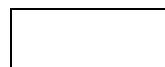
**C2.2 SCHEDULE OF QUANTITIES**

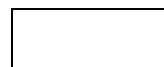
The Pricing Schedules must be completed in full and all expected costs must be reflected including all costs, expenses and disbursements all as described in the pricing instructions.

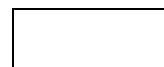
Project Discipline	Project Fee Category (Clause 4.3.1 of ECSA guidelines)
Wastewater Treatment Infrastructure Projects	A, B, C, D, E, F, G
Roads and Stormwater Management Projects	A, C
Building Works	A, C, E, F
Approximate Project Duration	36 Months

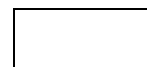
  
Contractor

  
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Employer

  
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## 1. FINANCIAL PARAMETERS FOR WASTEWATER INFRASTRUCTURE PROJECTS

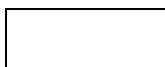
The Financial Parameters and Indicative Quantities in this section are estimated based on an indicative model project for the design and construction of a fully functional Macro sized Water Care Works of 35 ML/Day over a period of three years for an estimated cost per capita of R 19 000 000 /ML i.e., for an indicative Budget of **R 665 000 000** for all the necessary Structural, Civil, Mechanical, Electrical, Control and Instrumentation, Electronical, etc. **The possible works have been classified accordingly in terms of Project Types and Fee Categories under each engineering discipline as per the provisions of the ECSA guidelines.**

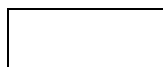
### 1.1. FINANCIAL PARAMETERS FOR CIVIL, STRUCTURAL AND WATER/WASTEWATER HYDRAULICS ENGINEERING DISCIPLINES: WASTEWATER/WATER, MUNICIPAL AND BUILDING CIVILS, GEOTECHNICAL, REINFORCED CONCRETE AND STRUCTURAL STEEL.

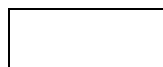
#### General

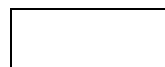
- a) The Consulting Engineer is to tender a percentage fees in terms of the the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act , 2000 (Act No. 46 of 200) Board Notice 138 of 2015 Government Gazette No. 39480, dated 4 December 2015 by Engineering Council of South Africa (ECSA), upon a typical **R 315 000 000** "Indicative Cost of Works" for Civil Engineering, Structural Engineering, Water/Wastewater Hydraulics Engineering Works broken down into Project Types and the estimated indicative budget.
- b) The work is associated with risk factors such as lack of as-built information, dolomite related challenges and unknown existing services:
  - b.1. Therefore, the Normal Service shall be expected to require engineering input that warrants a typical fee scale which lies between the median and upper percentages.
  - b.2. Therefore, the bidder needs to consider the nature and extent of the bid, and select a percentage fee for the respective typical project according to the details given in item number (c) below.
  - b.3. As a risk mitigation measure, all Offered Fees shall not fall more than 10% below the estimated ERWAT basic Fee.
- c) The anticipated Civil Engineering, Structural Engineering and Wastewater Hydraulics Engineering Projects, as per the provisions of Clause 4.3.1 of the ECSA guidelines shall fall under the categories listed below, and broken down to the provided Fee Categories, mean fee range percentages and respective Indicative Budget:
  - c.1. Category B Projects:
    - c.1.1. Project Types: Large Earth Dams
    - c.1.2. Indicative Budget: R11 500 000

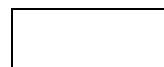
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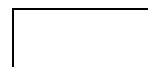
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

c.1.3. Mean Fee Range: typical range 7% - 9%, accept 8.5% for this work.

c.2. Category C Projects:

c.2.1. Project Types: Large Concrete Dams; Stormwater structures, Breakers and canals; Minor reinforced concrete and structural steel; Building Civils; Municipal Services.

c.2.2. Indicative Budget: R 27 000 000

c.2.3. Mean Fee Range: typical range 8% - 10%, accept 9.5% for this work.

c.3. Category D Projects:

c.3.1. Project Types: Small Dams; RC Concrete Water/Wastewater Retaining Structures; Bulk Sewer pipelines; Wastewater Treatment related pipelines.

c.3.2. Indicative Budget: R 50 000 000

c.3.3. Mean Fee Range: typical range 9% - 11%, accept 10.5% for this work.

c.4. Category E Projects:

c.4.1. Project Types: Pumpstations; Building Structural; Unique RC Concrete and steel Structures, Water Towers.

c.4.2. Indicative Budget: R 11 500 000

c.4.3. Mean Fee Range: typical range 10% - 13%, accept 12% for this work.

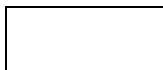
c.5. Category F Projects:

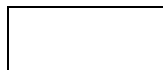
c.5.1. Project Types: Wastewater Treatment Works; Complex Load Bearing Structures.

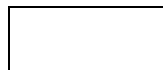
c.5.2. Indicative Budget: R 215 000 000

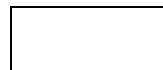
c.5.3. Mean Fee Range: typical range 12% - 15%, accept 14% for this work.

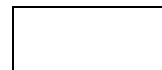
- d) The Bidder shall complete the pricing tables in full, and if no rate/fee is offered in the space provided in Activity Table, the bid will be disqualified and consequently be rejected, even if the rest of the table is completed.
- e) The Pricing Schedules/Tables contain reference clauses that relate to the items stipulated in the Scope of Works (e.g., C 3.3.1, Item 2.1) and ECSA Guidelines (e.g., ECSA Clause 3.3.1).
- f) **For Activity 3: Time Based**, the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause **C 3.1.2 Mandatory Requirements**" of the Scope of Works.
- g) **For Activity 1: Normal Services**,
- g.1. The proportion of the fees shall be based on clause 4.3.6 of the ECSA guidelines.
- g.2. a **Minimum** Offered Basic Fee that is not more than 10% below the estimated ERWAT basic fee will be accepted for all bids, the summary of the Project Types, applicable categories and fee scales, Indicative Project Budget and Estimated Basic Fee Percentage are given in the table below:

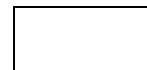
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

Summary of Project Types, Project Categories and Fee Scales, indicative Budget and Estimated Basic Fee Percentage.					
[Formula: Basic Percentage fee = (% Fee Cat + 16.3% - 100*(0.023 * log (Cost of Works))]					
Item	Project Type	Indicative Contract Amount	Mean Fee Range	ERWAT Basic fee	
				Basic %	Rand Value
1	Category B Project Types				
1.1	Large Earth Dams	R 11 500 000	8.5%	8.5%	R 977 500
2	Category C Project Types				
2.1	Large Concrete Dams;	R 27 000 000	9.5%	8.71%	R 2 351 700
2.2	Stormwater structures, Breakers and Canals, Wastewater Treatment Related Pipelines, Minor Hydraulic Structures;				
2.3	Minor reinforced concrete and structural steel;				
2.4	Building Civils, Municipal Services.				
3	Category D Project Types				
3.1	Small Dams;	R 50 000 000	10.5%	9.25%	R 3 931 250
3.2	RC Concrete Water/Wastewater Retaining Structures.				
4	Category E Project Types				
4.1	Pumpstations;	R11 500 000	12%	12%	R 1 380 000
4.2	Building Structural;				
4.3	Unique RC Concrete and steel Structures;				
4.4	Water Towers.				
5	Category F Project Types				
5.1	Wastewater Treatment Works;	R 215 000 000	14%	11.14%	R 23 951 000
5.2	Complex Load Bearing Structures.				

#### 1.1.1.SCHEDULE OF FEES FOR ACTIVITY 1: NORMAL SERVICES (ECSA Clause 4.3)

- 1.1.1.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.1.1.2. The quantities and amounts in the schedule of fees below shall be solely indicative and will be used for evaluation purposes only.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 1.1.1.3. As risk mitigation measure, Offered Basic Fees are deemed acceptable to a **Minimum** that is 10% below the estimated ERWAT basic Fee, and any Offer that falls below 10% shall not be acceptable.

SCHEDULE OF FEES FOR ACTIVITY 1 – NORMAL SERVICES FOR CIVIL, STRUCTURAL AND WATER/WASTEWATER HYDRAULICS PROJECTS: Fees Based on Cost of Works For rendering Normal Engineering Service.						
Item	Project Type	Indicative Contract Amount	ERWAT Basic Fees		Offered Fees	
			% Basic	Rands	% Offer	Offered Fee (Rands)
1	Category B Project Types	R 11 500 000	8.5%	R 977 500		
2	Category C Project Types	R 27 000 000	9.5%	R 2 351 700		
3	Category D Project Types	R 50 000 000	9.25%	R 3 931 250		
4	Category E Project Types	R 11 500 000	12%	R 1 380 000		
5	Category F Project Types	R 215 000 000	11.13%	R 23 951 000		
Indicative Subtotal for Fees Carried Forward to summary schedule for Civil, Structural and Water/Wastewater Hydraulics projects						

ACTIVITY 1: Proportioning of basic fee for NORMAL SERVICES over the various stages of the service		
ECSA Clause Ref.	Project Stages	Typical Proportion Percentage
3.2.1	Stage 1: Inception Services	5%
3.2.2	Stage 2: Concept & Viability (Preliminary Design)	25%
3.2.3	Stage 3: Design Development (Detail Design)	25%
3.2.4	Stage 4: Documentation and Procurement	15%
3.2.5	Stage 5: Contract Administration and Inspection	25%
3.2.6	Stage 6: Close-Out	5%

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### 1.1.2.SCHEDULE FOR ADDITIONAL SERVICES: ACTIVITY 2 (ECSA Clause 4.4)

1.1.2.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.

1.1.2.2. The quantities and amounts in the schedule for additional services below shall be solely indicative and will be used for evaluation purposes only.

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	Taking Over of Designs Done by other Consulting Engineers (ECSA Clause 3.3.1)	Prov. Sum per Order	1	R 5000 000	R 5000 000
2.	<b>GEOTECHNICAL INVESTIGATION</b> (inclusive of all necessary Tests, Laboratory Services, Analysis and Reporting) in line with ECSA Clause 3.3.1 and C3.2.3 item 2.8 of the scope of works				
a)	Foundation Stability Investigations of Existing Wastewater Process Units (i.e Settling Tanks, Digestors, Reactors)	No	5000		
b)	Foundation design of new RC Concrete Wastewater Process Units	No	5000		
3.	<b>DOLOMITE STABILITY INVESTIGATION</b> (in line with "Clause C3.2.3, item 2.8" of the Scope of Works, for a Typical 20 Ha site, underlain with dolomite and used for Wastewater Treatment Works).				
a)	Desktop studies and inception report	Sum Per Order	1		
b)	Site Preliminary and General requirements: <ul style="list-style-type: none"> <li>– Safety Files</li> <li>– Induction of Staff</li> <li>– Full PPE (boots and full site overalls)</li> </ul>	Sum Per Order	1		
c)	Data Analysis and Preliminary Reporting	Sum Per Order	1		
d)	Geo-Science approval and Final Reporting	Sum Per Order	1		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
e)	Presentations to client	No	100		
f)	Provision of Health and Safety	Sum Per Order	1		
g)	Drilling of boreholes and backfilling ( i.e. using percussion drilling method, re-measurable after drill is complete)	No	120		
g.1.	Drilling 60-meter boreholes and backfilling	No	120		
g.2.	Drilling 40-meter boreholes and backfilling.	No	120		
g.3.	Laboratory Analysis of material	Sum Per Order	1		
h)	Gravity survey				
h.1.	10-meter Grid Survey	Ha	20		
h.2.	30-meter Grid Survey	Ha	20		
i)	Excavation of Test pits, backfilling and Lab Analysis.	No	120		
j)	DCP Testing and Lab Analysis	No	120		
k)	DPSH Testing and Lab Analysis	No	120		
l)	Compaction Testing and Lab Analysis (CBR & Modified AASTHO)	No	120		
m)	Underground Service detection for Boreholes/Test Pits	No	120		
n)	Repairs of Broken pipes	Prov. Sum per order	1	R 2 000 000.00	R 2 000 000.00
o)	Handling Costs for (n) above	%			
p)	Travelling Cost	Km	90 000		
q)	TLB Hire	Hr	200		
r)	Excavator Hire	Hr	200		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
4.	<b>STRUCTURAL CONDITION ASSESSMENT FOR HARDENED RC STRUCTURAL CONCRETE</b> (Inclusive of all Sample extraction/Field Work, Laboratory Testing, Analysis and Reporting) in line with <b>C3.2.3, Item 2.5.1</b>				
a)	<b>Destructive Strength Testing (Aligned to item 2.5.1 (a))</b>				
a.1.	Concrete Core drilling and Testing	No	20 000		
a.2.	Tensile Strength Test	No	20 000		
b)	<b>Non-Destructive Strength Testing (Aligned to item 2.5.1 (b))</b>				
b.1.	Steel Pull Out Test	No	20 000		
b.2.	Rebound Hammer	No	20 000		
b.3.	Ultrasonic Pulse Velocity	No	20 000		
b.4.	Penetration Resistance Test	m <sup>2</sup>	2000		
b.5.	Crack widths and depths	m <sup>2</sup>	2000		
b.6.	Water Permeability	m <sup>2</sup>	2000		
b.7.	Reinforcement Scanning	m <sup>2</sup>	2000		
b.8.	Electrochemical Potential of Reinforcement	No	10 000		
c)	<b>Chemical Testing (Aligned to item 2.5.1 (c))</b>				
c.1.	Carbonation Test	No	20 000		
c.2.	Chloride Content Test	No	20 000		
c.3.	Sulphate Content Test	No	20 000		
c.4.	Alkali Content Test	No	20 000		
c.5.	Cement Content and Type	No	20 000		
5.	<b>WASTEWATER HYDRAULICS TESTING</b> (in line with <b>C3.2.3, Item No 2.5.2</b> of the scope of works)				
a)	Sediment Transport and Deposition Test, including settling velocity testing. (Aligned to item 2.5.2.1)	No	2000		
b)	7 Days Flow Logging (Aligned to item 2.5.2.2)	No	2000		
c)	7 Days Pressure Logging (Aligned to item 2.5.2.3)	No	2000		
d)	7 Days Sewer Flow Logging (Aligned to item 2.5.2.3)	No	2000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
6.	<b>ENVIRONMENTAL AUTHORIZATIONS</b> (for Design and Construction of a Wastewater Care Works, carried out in line with “ <b>Clause C3.2.3, item 2.9</b> ” of the Scope of Works)				
a)	<b>Environmental Impact Assessment Process</b>				
a.1.	EIA Application Phase (in line with “ <b>item 2.9.1.2.1</b> ” of the Scope of Works)	Sum Per Order	1		
a.2.	Basic Assessment (in line with “ <b>item 2.9.1.2.2</b> ” of the Scope of Works)	Sum Per Order	1		
a.3.	Scoping and EIA Process (in line with “ <b>item 2.9.1.2.3</b> ” of the Scope of Works)	Sum Per Order	1		
b)	<b>Specialist Studies</b>				
b.1.	Archaeological and Cultural Heritage Assessment	Hr	5000		
b.2.	Ecological/Wetland/Biodiversity Assessment	Hr	5000		
b.3.	Hydrological/Geo-Hydrologic Assessment	Hr	5000		
b.4.	Geotechnical Assessment	Hr	5000		
b.5.	Socio-Economic Assessment	Hr	5000		
b.6.	Air Quality Assessment	Sum Per Order	1		
b.7.	Noise Assessment	Sum Per Order	1		
c)	<b>Water Use License and General Authorization (GA/WUL)</b>				
c.1.	Water Use License Application/Amendment (in line with “ <b>item 2.9.3.1</b> ” of the Scope of Works)	Sum Per Order	1		
c.2.	General Authorization	Sum Per Order	1		
7.	<b>WASTEWATER SAMPLING, LABORATORY ANALYSIS AND REPORTING</b> (for a typical comprehensive sampling program (i.e Sampling, Laboratory Analysis and Reporting) on Wastewater Care Works to conduct process modelling of the Works, in line with <b>Clause C3.2.3, Item 2.6</b> of the scope of work)				

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
a)	Inflow/Outflow Reading	No	2000		
b)	Total COD (unfiltered) mg/l	No	2000		
c)	Total COD (filtered)	No	2000		
d)	Free and Saline Ammonia mg/l	No	2000		
e)	N-Total Kjeldahl Nitrogen mgN/L	No	2000		
f)	Ortho Phosphate mg/l	No	2000		
g)	P-Total P mgP/L	No	2000		
h)	Total Suspended Solids mg/l	No	2000		
i)	VSS Total mg ISS/L	No	2000		
j)	pH	No	2000		
k)	Total Alkalinity as CaCO <sub>3</sub>	No	2000		
l)	Conductivity	No	2000		
m)	MLSS	No	2000		
n)	MLVSS	No	2000		
o)	0.45µ Filtered Free and Saline Ammonia	No	2000		
p)	0.45µ Filtered Nitrate/Nitrite	No	2000		
q)	0.45µ Filtered Ortho P	No	2000		
r)	Totalised daily WAS pumping rate	No	2000		
s)	DO concentrations for each cell (SCADA profile if available otherwise use a portable DO meter to record DO values as frequently as possible)	No	2000		
t)	Bioreactor temperature	No	2000		
u)	Internal mixed liquor "a" recycle pumping rate (totalised daily rate)	No	2000		
v)	Ferric dosing rate	No	2000		
w)	RAS pumping rate	No	2000		
x)	Chlorine dosing rate	No	2000		
y)	Nitrate/Nitrite	No	2000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
z)	Free chlorine	No	2000		
8.	<b>SPECIALIST STUDIES AND INVESTIGATIONS</b>				
a)	CCTV for pipes between 150 up to 250mm diameter	m	10 000		
b)	CCTV for pipes greater than 250 up to 350mm diameter	m	10 000		
c)	CCTV for pipes between 350 up to 450mm diameter	m	10 000		
d)	CCTV for pipes greater than 450 up to 650mm diameter	m	10 000		
e)	CCTV for pipes greater than 650 mm diameter	m	10 000		
f)	Line Survey	m	10 000		
g)	Topographical Survey	m <sup>2</sup>	10 000		
h)	Provisional Sum for Other Specialist Services	Prov. Sum Per Order	1	R2 000 000	R2 000 000
i)	Handling/Administration fee for Additional Services	%			
9.	<b>CONSTRUCTION MONITORING (in line with ECSA Clause 3.3.2)</b>				
a)	Level 2: Part-time Construction Monitoring	Hrs	30 000		
b)	Level 3: Full-time Construction Monitoring	Hrs	30 000		
10.	<b>OCCUPATIONAL HEALTH AND SAFETY ACT, 1993(ACT NO.85 OF 1993) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO.107 OF 1998)</b>				
a)	Occupational Health and Safety Specification	No	1000		
b)	Environmental Construction Monitoring	Monthly	36		
c)	OHS Construction Monitoring	Monthly	36		
<b>Indicative Subtotal for Additional Services Fees Carried Forward to summary schedule for Civil, Structural and Water/Wastewater Hydraulics projects</b>					

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### 1.1.3.SCHEDULE OF RATES: ACTIVITY 3 TIME BASED FEES (ECSA Clause 4.2), RATES PER CATEGORY OF PROFESSIONAL PERSONNEL IN TERMS OF ECSA CLAUSE 4.2.2.

- 1.1.3.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.1.3.2. The quantities and amounts in the schedule of rates below shall be solely indicative and will be used for evaluation purposes only.
- 1.1.3.3. Bidders shall note that the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause **C 3.1.2 Mandatory Requirements**" of the Scope of Works

SCHEDULE OF RATES (ACTIVITY 3 – TIME BASED FEES)					
ECSA Clause Ref. 4.2	Type of service	Unit	Indicative Quantity	Rate per unit	Total R (Excl. VAT)
<b>1. Professional Structural Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub - Total 1</b>					
<b>2. Professional Structural Technologist/ Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub - Total 2</b>					
<b>3. Professional Geotechnical Engineer/Geologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub - Total 3</b>					
<b>4. Professional Hydraulics Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

<b>Indicative Sub - Total 4</b>					
<b>5. Professional Hydraulics Technologist/ Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub - Total 5</b>					
<b>6. Professional Process Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub – Total 8</b>					
<b>7. Professional Process Technologist/Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub – Total 7</b>					
<b>8. Lead Consultants: Civil Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub – Total 8</b>					
<b>9. Principal Agent : Civil Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub – Total 9</b>					
<b>10. Professional Construction Project Manager</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D	Hrs	20 000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

	[Candidate Project Manager]				
<b>Indicative Sub – Total 10</b>					
<b>Indicative Subtotal for Rates Based Fees Carried Forward to summary schedule for Civil, Structural and Water/Wastewater Hydraulics projects</b>					

#### 1.1.4. SCHEDULE FOR EXPENSES AND COST: ACTIVITY 4 (ECSA Clause 4.6)

- 1.1.4.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.1.4.2. The quantities and amounts in the schedule for expenses and costs below shall be solely indicative and will be used for evaluation purposes only.
- 1.1.4.3. All **Travelling and Subsistence** shall be compensated based on the **National Treasury** provisions for **Cost Containment Measures** as contained in **Circular No.82** of the **Municipal Finance Management Act No.56 of 2003**.

<b>SCHEDULE FOR EXPENSES AND COSTS (ACTIVITY 4 – EXPENSE AND COST)</b>					
<b>item</b>	<b>Activity Description</b>	<b>Unit</b>	<b>Indicative Quantity</b>	<b>Rate per Unit</b>	<b>Total R (Excl. VAT)</b>
1.	A4 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	40 000		
2.	A3 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
3.	A0 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
4.	Other Expenses [ECSA Clause 4.6.(1)]	Prov Sum Per Order	1	R 500 000	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



SCHEDULE FOR EXPENSES AND COSTS (ACTIVITY 4 – EXPENSE AND COST)					
item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
Indicative Subtotal for Cost and Expenses Fees Carried Forward to summary schedule for Civil, Structural and Water/Wastewater Hydraulics projects					

#### 1.1.5.SUMMARY PRICE SCHEDULE FOR PROFESSIONAL FEES UNDER CIVIL, STRUCTURAL AND WATER/WASTEWATER HYDRAULICS ENGINEERING WORKS

SUMMARY PRICE SCHEDULE FOR PROFESSIONAL FEES	
Schedule Of Fees: Activity 1: Normal Services.	R
Schedule For Additional Services: Activity 2.	R
Schedule Of Rates: Activity 3	R
Schedule For Expenses And Cost: Activity 4.	R
<b>TOTAL INDICATIVE PROFESSIONAL FEES FOR CIVIL, STRUCTURAL AND HYDRAULICS</b>	<b>R</b>
<b>NB: THE ABOVE-MENTIONED BID PRICE IS SOLELY INDICATIVE AND WILL BE USED FOR EVALUATION PURPOSES ONLY.</b>	

#### 1.2. FINANCIAL PARAMETERS FOR MECHANICAL ENGINEERING WORKS [DISCIPLINES: ENGINEERING SERVICES AND BUILDING SERVICES].

##### General

- a) The Consulting Engineer is to tender a percentage fees in terms of the the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act , 2000 (Act No. 46 of 200) Board Notice 138 of 2015 Government Gazette No. 39480, dated 4 December 2015 by Engineering Council of South Africa (ECSA), upon a typical **R 200 000 000** "Indicative Cost of Works" for Mechanical Engineering Works broken down into Project Types and Indicative budget.
- b) The work is associated with risk factors such as lack of as-built information, dolomite related challenges and unknown existing services:
  - b.1. Therefore, the Normal Service shall be expected to require engineering input that warrants a typical fee scale which lies between the median and upper percentages.
  - b.2. Therefore, the bidder needs to consider the nature and extent of the bid, and select a percentage fee for the respective typical project according to the details given in item number (c) below.
  - b.3. As a risk mitigation measure, all Offered Fees shall not fall more than 10% below the estimated ERWAT basic Fee.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- c) The anticipated Mechanical Engineering Projects, as per the provisions of Clause 4.3.1 of the ECSA guidelines shall fall under the Project Type Categories listed below, and broken down into Project Types, mean fee range percentages and respective Budget:
- c.1. Category C Project Types:
- c.1.1. Project Types: Mechanical plant and equipment, Refrigeration and Cold Storage
- c.1.2. Indicative Budget: R 100 000 000.
- c.1.3. Mean Fee Range: typical range 8% - 10%, accept 9.5% for this work.
- c.2. Category D Project Types:
- c.2.1. Project Types: HVAC Systems, Pumping and pipeline systems, Specialized fire protection systems such as gas, Vertical transportation systems and materials handling.
- c.2.2. Indicative Budget: R 20 000 000.
- c.2.3. Mean Fee Range: typical range 9%-11%, accept 10.5% for this work.
- c.3. Category E Project Types:
- c.3.1. Project Types: Industrial process, piping and instrumentation, Industrial building services and utilities, General building Services.
- c.3.2. Indicative Budget: R 50 000 000.
- c.3.3. Mean Fee Range: typical range 10% - 13%, accept 12% for this work.
- c.4. Category F Project Types:
- c.4.1. Project Types: Pressure vessel design, Hazardous material systems, Energy management, Specialized building services.
- c.4.2. Indicative Budget: R 30 000 000.
- c.4.3. Mean Fee Range: typical range 12% - 15%, accept 14% for this work.
- d) The Bidder shall complete the pricing tables in full, and If no rate/fee is offered in the space provided in Activity Table, the bid will be disqualified and consequently be rejected, even if the rest of the table is completed.
- e) The Pricing Tables contain reference clauses that relate to the items stipulated in the Scope of Works (e.g., C 3.3.1, Item 2.1) and ECSA Guidelines (e.g., ECSA Clause 3.3.1).
- f) **For Activity 3: Time Based**, the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause C 3.1.2 Mandatory Requirements" of the Scope of Works
- g) **For Activity 1: Normal Services:**
- g.1. The proportion of the fees shall be based on clause 4.3.6 of the ECSA guidelines.

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

g.2. a **Minimum** Offered Basic Fee that is not more than 10% below the estimated ERWAT basic fee will be accepted for all bids, the summary of the Project Types, applicable categories and fee scales, Indicative Project Budget and Estimated Basic Fee Percentage are given in the table below:

Summary of Project Types, Project Categories and Fee Scales, indicative Budget and Estimated Basic Fee Percentage.					
[Formula: Basic Percentage fee = (% Fee Cat + 16.3% - 100*(0.023 * log (Cost of Works))]					
Item	Project Type	Indicative Contract Amount	Mean Fee Range	ERWAT Basic fee	
				Basic %	Rand Value
1	Category C Project Types				
1.1	Mechanical Plant and Equipment, Refrigeration and Cold Storage	R 100 000 000	9.5%	7.4%	R 7 400 000
2	Category D Project Types				
2.1	HVAC Systems,	R 20 000 000	10.5%	10%	R 2 002 000
2.2	Pumping and pipeline systems,				
2.3	Specialized fire protection systems such as gas, foam, etc.				
2.4	Vertical transportation systems and materials handling.				
3	Category E Project Types				
3.1	Industrial process,	R 50 000 000	12%	10.59%	R 5 295 000
3.2	pipng and instrumentation,				
3.3	Industrial building services and utilities,				
3.4	General building Services i.e., Commercial, Offices				
4	Category F Project Types				
4.1	Pressure vessel design,	R 30 000 000	14%	13.1%	R 3 930 000
4.2	Hazardous material systems,				
4.3	Energy management,				
4.4	Specialized building services i.e., Laboratories, Research facilities.				

#### 1.2.1.SCHEDULE OF FEES FOR ACTIVITY 1: NORMAL SERVICES (ESCA Clause 4.3)

1.2.1.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 1.2.1.2. The quantities and amounts in the schedule of fees below shall be solely indicative and will be used for evaluation purposes only.
- 1.2.1.3. As risk mitigation measure, Offered Basic Fees are deemed acceptable to a Minimum that is 10% below the estimated ERWAT basic Fee, and any Offer that falls below 10% shall not be acceptable.

<b>SCHEDULE OF FEES FOR ACTIVITY 1 – NORMAL SERVICES FOR MECHANICAL ENGINEERING PROJECTS: Fees Based on Cost of Works For rendering Normal Engineering Service.</b>						
<b>Item</b>	<b>Project Type</b>	<b>Indicative Contract Amount</b>	<b>ERWAT Basic Fees</b>		<b>Offered Fees</b>	
			<b>% Basic</b>	<b>Rands</b>	<b>% Offer</b>	<b>Offered Fee (Rands)</b>
<b>1</b>	<b>Category C Project Types</b>	R 100 000 000	7.4%	R 7 400 000		
<b>2</b>	<b>Category D Project Types</b>	R 20 000 000	10%	R 2 002 000		
<b>3</b>	<b>Category E Project Types</b>	R 50 000 000	10.59%	R 5 295 000		
<b>4</b>	<b>Category F Project Types</b>	R 30 000 000	13.1%	R 3 930 000		
<b>Indicative Subtotal for Fees Carried Forward to summary schedule for Mechanical Engineering projects</b>						

<b>ACTIVITY 1: Proportioning of basic fee for NORMAL SERVICES over the various stages of the service</b>		
<b>ECSA Clause Ref.</b>	<b>Project Stages</b>	<b>Typical Proportion Percentage</b>
3.2.1	Stage 1: Inception Services	5%
3.2.2	Stage 2: Concept & Viability (Preliminary Design)	25%
3.2.3	Stage 3: Design Development (Detail Design)	25%
3.2.4	Stage 4: Documentation and Procurement	15%
3.2.5	Stage 5: Contract Administration and Inspection	25%
3.2.6	Stage 6: Close-Out	5%

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### 1.2.2.SCHEDULE FOR ADDITIONAL SERVICES: ACTIVITY 2 (ECSA Clause 4.4)

1.2.2.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.

1.2.2.2. The quantities and amounts in the schedule for additional services below shall be solely indicative and will be used for evaluation purposes only.

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	Taking Over of Designs Done by other Consulting Engineers [ECSA Clause 3.3.1(a)]	Prov. Sum Per Order	1	R2000 0000	R 2000 000
2.	<b>QUALITY ASSURANCE SYSTEM/ FACTORY ACCEPTANCE TESTING</b> (in line with <b>Clause C3.2.3</b> Project Specifications, <b>item 2.3 (b)</b> and <b>item 2.4</b> ).				
a)	Visual Inspections and Measurements (using Verner Calipers, Micrometers, Dial Gauge, Pressure Gauge).	Hrs	1000		
b)	Hydraulic Performance Tests (item 2.3 (b1))	Hrs	1000		
c)	Proof Pressure Tests (item 2.3 (b2))	Hrs	1000		
d)	Mechanical Vibration (item 2.3 (b3))	Hrs	1000		
3.	<b>SPECIALIST SERVICES, STUDIES, TESTS AND INSPECTIONS</b>				
a)	Provisional Sum for Other Specialist Services, Studies and Inspections.	Prov. Sum	1	R2 000 000	R2 000 000
b)	Handling/Administration fee for Additional Services	%			
4.	<b>CONSTRUCTION MONITORING</b> [ ECSA Clause 3.3.2]				
a)	Level 2: Part-time Construction Monitoring	Hrs	10 000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2: ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
b)	Level 3: Full-time Construction Monitoring	Hrs	30 000		
5.	<b>OCCUPATIONAL HEALTH AND SAFETY ACT, 1993(ACT NO.85 OF 1993) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO.107 OF 1998)</b>				
a)	Occupational Health and Safety Specification	No	20		
b)	Environmental Authorizations	No	10		
c)	Environmental Construction Monitoring	Monthly	36		
d)	OHS Construction Monitoring	Monthly	36		
<b>Indicative Subtotal for Additional Services Fees Carried Forward to summary schedule for Mechanical Engineering Projects</b>					

### 1.2.3.SCHEDULE OF RATES: ACTIVITY 3 TIME BASED FEES (ECSA Clause 4.2) ), RATES PER CATEGORY OF PROFESSIONAL PERSONNEL IN TERMS OF ECSA CLAUSE 4.2.2.

- 1.2.3.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.2.3.2. The quantities and amounts in the schedule of rates below shall be solely indicative and will be used for evaluation purposes only.
- 1.2.3.3. Bidders shall note that the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause C 3.1.2 Mandatory Requirements" of the Scope of Works.

SCHEDULE OF RATES: ACTIVITY 3 TIME BASED FEES (ECSA Clause 4.2)					
ECSA Clause Ref. 4.2	Type of service	Unit	Indicative Quantity	Rate per unit	Total R (Excl. VAT)
<b>1. Professional Mechanical Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 1</b>					
<b>2. Professional Mechanical Technologist/Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 2</b>					
<b>3. Lead Consultant: Mechanical Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 3</b>					
<b>4. Principal Agent: Mechanical Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 4</b>					
<b>5. Professional Construction Project Manager:</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Project Manager]	Hrs	20 000		
<b>Indicative Sub-Total 5</b>					
<b>Indicative Subtotal for Rates Based Fees Carried Forward to summary schedule for Mechanical Engineering Projects</b>					

#### 1.2.4.SCHEDULE FOR EXPENSES AND COST: ACTIVITY 4 (ECSA Clause 4.6)

- 1.2.4.1. The bidder shall note that the indicative quantities, rates and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.2.4.2. The quantities and amounts in the schedule for expenses and costs below shall be solely indicative and will be used for evaluation purposes only.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 1.2.4.3. All **Travelling and Subsistence** shall be compensated based on the **National Treasury** provisions for **Cost Containment Measures** as contained in **Circular No.82** of the **Municipal Finance Management Act No.56 of 2003**.

SCHEDULE FOR EXPENSES AND COST: ACTIVITY 4 (ECSA Clause 4.6)					
item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	A4 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	40 000		
2.	A3 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
3.	A0 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
4.	Other Expenses [ECSA Clause 4.6.(1)]	Prov Sum	1	R 500 000	
<b>Indicative Subtotal for Rates Based Fees Carried Forward to summary schedule for Mechanical Engineering Projects</b>					

#### 1.2.5.SUMMARY PRICE SCHEDULE FOR PROFESSIONAL FEES UNDER MECHANICAL ENGINEERING WORKS

SUMMARY PRICE SCHEDULE FOR PROFESSIONAL FEES	
Schedule Of Fees: Activity 1: Normal Services.	R
Schedule For Additional Services: Activity 2.	R
Schedule Of Rates: Activity 3	R
Schedule For Expenses And Cost: Activity 4.	R
<b>TOTAL INDICATIVE PROFESSIONAL FEES FOR MECHANICAL ENGINEERING</b>	<b>R</b>

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



**NB: THE ABOVE-MENTIONED BID PRICE IS SOLELY INDICATIVE AND WILL BE USED FOR EVALUATION PURPOSES ONLY.**

**1.3. FINANCIAL PARAMETERS FOR ELECTRICAL AND ELECTRONIC ENGINEERING WORKS  
[DISCIPLINES: ELECTRICAL ENGINEERING SERVICES, ELECTRONIC ENGINEERING  
SERVICES, CONTROL AND INSTRUMENTATION ENGINEERING SERVICES, AND  
BUILDING RELATED ELECTRICAL ENGINEERING SERVICES].**

**General**

- a) The Consulting Engineer is to tender a percentage fees in terms of the the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act , 2000 (Act No. 46 of 200) Board Notice 138 of 2015 Government Gazette No. 39480, dated 4 December 2015 by Engineering Council of South Africa (ECSA), upon a typical **R 150 000 000** "Indicative Cost of Works" for Electrical and Electronic Engineering Works broken down into Project Types and estimated indicative budget.
- b) The work is associated with risk factors such as lack of as-built information, dolomite related challenges and unknown existing services:
- b.1. Therefore, the Normal Service shall be expected to require engineering input that warrants a typical fee scale which lies between the median and upper percentages.
- b.2. Therefore, the bidder needs to consider the nature and extent of the bid, and select a percentage fee for the respective typical project according to the details given in item number (c) below.
- b.3. As a risk mitigation measure, all Offered Fees shall not fall more than 10% below the estimated ERWAT basic Fee.
- c) The anticipated Electrical Engineering Projects, as per the provisions of Clause 4.3.1 of the ECSA guidelines shall fall under the Project Type Categories listed below, and broken down into Project Types, mean fee range percentages and respective indicative Budget:
- c.1. Category C Project Types:
- c.1.1. Project Types: MV and LV Distribution.
- c.1.2. Indicative Budget: R 60 000 000.
- c.1.3. Mean Fee Range: typical range 8% - 10%, accept 9.5% for this work.
- c.2. Category D Project Types:
- c.2.1. Project Types: Areal Lighting, energy generation and transmission.
- c.2.2. Indicative Budget: R 11 500 000.
- c.2.3. Mean Fee Range: typical range 9%-11%, accept 10.5% for this work.
- c.3. Category E Project Types:

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- c.3.1. Project Types: Communications, data and IT cabling systems; Industrial process, wiring and instrumentation; Fire protection, security and access control; Motor control and electrical installations for machinery and equipment; Industrial building services and utilities, General building Services.
- c.3.2. Indicative Budget: R 37 000 000.
- c.3.3. Mean Fee Range: typical range 10% - 13%, accept 12% for this work.
- c.4. Category F Project Types:
  - c.4.1. Project Types: Energy management; Specialized building services.
  - c.4.2. Indicative Budget: R 11 500 000.
  - c.4.3. Mean Fee Range: typical range 12% - 15%, accept 14% for this work.
- c.5. Category G Project Types:
  - c.5.1. Project Types: Electronic Engineering, Telemetry, Cathodic protection.
  - c.5.2. Indicative Budget: R 30 000 000.
  - c.5.3. Mean Fee Range: typical range 13% - 17%, accept 15% for this work.
- d) The Bidder shall complete the pricing tables in full, and If no rate/fee is offered in the space provided in Activity Table, the bid will be disqualified and consequently be rejected, even if the rest of the table is completed.
- e) The Pricing Tables contain reference clauses that relate to the items stipulated in the Scope of Works (e.g., C 3.3.1, Item 2.1) and ECSA Guidelines (e.g., ECSA Clause 3.3.1).
- f) **For Activity 3: Time Based**, the experience required shall be based on work of the same nature as described in “Clause **C 3.1.2 Mandatory Requirements**” of the Scope of Works, the other requirements shall be aligned to Clause 4.2.2 of the ECSA guidelines.
- g) **For Activity 1: Normal Services:**
  - g.1. The proportion of the fees shall be based on clause 4.3.6 of the ECSA guidelines.
  - g.2. a **Minimum** Offered Basic Fee that is not more than 10% below the estimated ERWAT basic fee, will be accepted for all bids, the summary of the Project Types, applicable categories and fee scales, Indicative Project Budget and Estimate Basic Fee Percentage are given in the table below:

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

Summary of Project Types, Project Categories and Fee Scales, indicative Budget and Estimated Basic Fee Percentage.					
[Formula: Basic Percentage fee = (% Fee Cat + 16.3% - 100*(0.023 * log (Cost of Works))]					
Item	Project Type	Indicative Contract Amount	Mean Fee Range	ERWAT Basic fee	
				Basic %	Rand Value
1	Category C Project Types				
1.1	MV and LV Distribution	R 60 000 000	9.5%	7.4%	R 7 400 000
	Building Services				
2	Category D Project Types				
2.1	Areal Lighting	R 11 500 000	10.5%	10.5%	R 1 207 500
	Energy generation and Transmission				
2	Category E Project Types				
2.1	Communications, data and IT cabling systems;	R 37 000 000	12%	10.89%	R 4 029 300
2.2	Industrial process, wiring and instrumentation;				
2.3	Fire protection, security and access control;				
2.4	Motor control and electrical installations for machinery and equipment;				
2.5	Industrial building services and utilities;				
2.6	General building Services i.e., Offices.				
3	Category F Project Types				
3.1	Energy management;	R 11 500 000	14%	14%	R 1 610 000
3.2	Specialized building services i.e., Laboratories, Research facilities.				
4	Category G Project Types				
4.1	Electronic Engineering,	R 30 000 000	15%	14.1%	R 4 230 000
4.2	Telemetry,				
4.3	Cathodic protection.				

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### 1.3.1.SCHEDULE OF FEES FOR ACTIVITY 1: NORMAL SERVICES (ESCA Clause 4.3)

- 1.3.1.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.3.1.2. The quantities and amounts in the schedule of fees below shall be solely indicative and will be used for evaluation purposes only.
- 1.3.1.3. As risk mitigation measure, Offered Basic Fees are deemed acceptable to a Minimum that is 10% below the estimated ERWAT basic Fee, and any Offer that falls below 10% shall not be acceptable.

SCHEDULE OF FEES FOR ACTIVITY 1: NORMAL SERVICES FOR ELECTRICAL (INCLUDING CONTROL AND INSTRUMENTATION) AND ELECTRONIC ENGINEERING WORKS: Fees Based on Cost of Works For rendering Normal Engineering Service.						
Item	Project Type	Indicative Contract Amount	ERWAT Basic Fees		Offered Fees	
			% Basic	Rands	% Offer	Offered Fee (Rands)
1	Category C Project Types	R 60 000 000	7.4%	R 7 400 000		
2	Category D Project Types	R 11 500 000	10.5%	R 1 207 500		
3	Category E Project Types	R 37 000 000	10.89%	R 4 029 300		
4	Category F Project Types	R 11 500 000	14%	R 1 610 000		
5	Category G Project Types	R 30 000 000	14.1%	R 4 230 000		
Indicative Subtotal for Fees Carried Forward to summary schedule for Electrical Engineering projects						

### 1.3.2.SCHEDULE FOR ADDITIONAL SERVICES: ACTIVITY 2 (ECSA Clause 4.4)

- 1.3.2.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.3.2.2. The quantities and amounts in the schedule for additional services below shall be solely indicative and will be used for evaluation purposes only.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2 : ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	Taking Over of Designs Done by other Consulting Engineers [ECSA Clause 3.3.1(a)]	Prov. Sum Per Order	1	R 2 000 000	R 2 000 000
2.	<b>QUALITY ASSURANCE SYSTEM/ FACTORY ACCEPTANCE TESTING</b> (in line with <b>Clause C3.2.3</b> Project Specifications, <b>item 2.3 (a)</b> and <b>item 2.4(b)</b> )				
a)	Inspection and Testing for Transformers (in line with <b>a.1</b> in <b>item 2.3 (a)</b> and <b>a.1</b> in <b>item 2.4(a)</b> )	Hrs	1000		
b)	Conduct Inspection and Testing for Miniature substations and normal substations (in line with <b>a.2</b> in <b>item 2.3 (a)</b> and <b>a.2</b> in <b>item 2.4(a)</b> )	Hrs	1000		
c)	Conduct Inspection and Testing for Generators (in line with <b>a.3</b> in <b>item 2.3 (a)</b> and <b>a.3</b> in <b>item 2.4(a)</b> )	Hrs	1000		
d)	Conduct Inspection and Testing for Motor Control Centre (MCC) (in line with <b>a.4</b> in <b>item 2.3 (a)</b> and <b>a.4</b> in <b>item 2.4(a)</b> )	Hrs	1000		
e)	Conduct Inspection and Testing of Motors (in line with <b>a.5</b> in <b>item 2.3 (a)</b> and <b>a.5</b> in <b>item 2.4(a)</b> )	Hrs	1000		
3.	<b>TELEMETRY AND CATHODIC PROTECTION</b>				
a)	AC Mitigation	m	10 000		
b)	Service Detection	m	10 000		
c)	Soil resistivity Surveys	m	10 000		
d)	Direct Current Voltage Gradient Surveys (DCVG)	m	10 000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2 : ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
e)	Current Drain Testing/Survey	m	10 000		
f)	Stray Current	m	10 000		
g)	7 days Pressure logging using GSM loggers	No.	1000		
h)	7 days Flow logging using GSM loggers	No.	1000		
i)	Leak detection by correlator, Acoustics logging, listening stick, gas and any suitable technology.	m	2000		
j)	Location, trial and closure of existing valves for discreteness testing.	No.	1000		
4.	<b>SPECIALIST SERVICES, STUDIES, TESTS AND INSPECTIONS</b>				
a)	Provisional Sum for Other Specialist Services, Studies, Tests, and Inspections	Prov. Sum Per Order	1	R2 000 000	R2 000 000
b)	Handling/Administration fee	%			
5.	<b>CONSTRUCTION MONITORING [ ECSA Clause 3.3.2]</b>				
a)	Level 2: Part-time Construction Monitoring	Hrs	10 000		
b)	Level 3: Full-time Construction Monitoring	Hrs	30 000		
6.	<b>OCCUPATIONAL HEALTH AND SAFETY ACT, 1993(ACT NO.85 OF 1993) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO.107 OF 1998)</b>				
a)	Occupational Health and Safety Specification	No	1000		
b)	Environmental Authorizations	No	1000		
c)	Environmental Construction Monitoring	Monthly	36		
d)	OHS Construction Monitoring	Monthly	36		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR ADDITIONAL SERVICES (ACTIVITY 2 : ADDITIONAL SERVICES)					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
Indicative Subtotal for Additional Services Carried Forward to summary schedule for Electrical and Electronic Engineering Works					

### 1.3.3.SCHEDULE OF RATES: ACTIVITY 3 TIME BASED FEES (ECSA Clause 4.2), RATES PER CATEGORY OF PROFESSIONAL PERSONNEL IN TERMS OF ECSA CLAUSE 4.2.2.

- 1.3.3.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.3.3.2. The quantities and amounts in the schedule of rates below shall be solely indicative and will be used for evaluation purposes only.
- 1.3.3.3. Bidders shall note that the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause C 3.1.2 Mandatory Requirements" of the Scope of Works.

SCHEDULE OF RATES (ACTIVITY 3 – TIME BASED FEES)					
ECSA Clause Ref. 4.2	Type of service	Unit	Indicative Quantity	Rate per unit	Total R (Excl. VAT)
<b>1. Professional Electrical Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
Indicative Sub-Total 1					
<b>2. Professional Electrical Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
Indicative Sub-Total 2					
<b>3. Professional Control and Instrumentation or Electronic Engineer</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

<b>Indicative Sub-Total 3</b>					
<b>4. Professional Control and Instrumentation or Electronic Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 4</b>					
<b>5. Lead Consultant: Electrical Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 5</b>					
<b>6. Principal Agent : Electrical Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 6</b>					
<b>7. Professional Construction Project Manager</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Project Manager]	Hrs	20 000		
<b>Indicative Sub-Total 7</b>					
<b>Indicative Subtotal for Rates Based Fees Carried Forward to summary schedule for Electrical and Electronic Engineering Works</b>					

#### 1.3.4.SCHEDULE FOR EXPENSES AND COST: ACTIVITY 4 (ECSA Clause 4.6)

- 1.3.4.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 1.3.4.2. The quantities and amounts in the schedule for expenses and costs below shall be solely indicative and will be used for evaluation purposes only.
- 1.3.4.3. All **Travelling and Subsistence** shall be compensated based on the **National Treasury** provisions for **Cost Containment Measures** as contained in **Circular No.82** of the **Municipal Finance Management Act No.56 of 2003**.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



SCHEDULE FOR EXPENSES AND COSTS (ACTIVITY 4 – EXPENSE AND COST)					
item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	A4 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	40 000		
2.	A3 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
3.	A0 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
4.	Other Expenses [ECSA Clause 4.6.(1)]	Prov. Sum	1	R 500 000	
<b>Indicative Subtotal for Cost and Expenses Fees Carried Forward to summary schedule for Electrical and Electronic Engineering Works</b>					

### 1.3.5.SUMMARY PRICE SCHEDULE FOR PROFESSIONAL UNDER ELECTRICAL (INCLUDING CONTROL AND INSTRUMENTATION) AND ELECTRONIC ENGINEERING WORKS

SUMMARY PRICE SCHEDULE FOR PROFESSIONAL FEES	
Schedule Of Fees: Activity 1: Normal Services.	R
Schedule For Additional Services: Activity 2.	R
Schedule Of Rates: Activity 3	R
Schedule For Expenses And Cost: Activity 4.	R
<b>TOTAL INDICATIVE PROFESSIONAL FEES FOR ELECTRICAL AND ELECTRONIC ENGINEERING WORKS</b>	<b>R</b>
<b>NB: THE ABOVE-MENTIONED BID PRICE IS SOLELY INDICATIVE AND WILL BE USED FOR EVALUATION PURPOSES ONLY.</b>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

1.4. SUMMARY PRICE SCHEDULE FOR WASTEWATER INFRASTRUCTURE

SUMMARY PRICE SCHEDULE FOR WASTEWATER INFRASTRUCTURE PROFESSIONAL FEES	
Total Indicative Professional Fees For Civil Engineering Works	R
Total Indicative Professional Fees For Mechanical Engineering Works	R
Total Indicative Professional Fees For Electrical And Electronic Engineering Works	R
TOTAL INDICATIVE PROFESSIONAL FEES FOR WASTEWATER INFRASTRUCTURE	R
NB: THE ABOVE-MENTIONED BID PRICE IS SOLELY INDICATIVE AND WILL BE USED FOR EVALUATION PURPOSES ONLY.	

Contractor

Witness 1

Witness 2

Employer

Witness 1

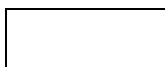
Witness 2

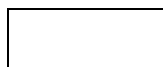
## 2. FINANCIAL PARAMETERS FOR ROADS AND STORMWATER MANAGEMENT.

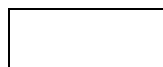
### General

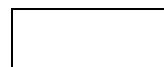
- a) The Consulting Engineer is to tender a percentage fees in terms of the the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act , 2000 (Act No. 46 of 200) Board Notice 138 of 2015 Government Gazette No. 39480, dated 4 December 2015 by Engineering Council of South Africa (ECSA), upon a typical **R 200 000 000** “ Indicative Cost of Works” for Roads and Stormwater Management Works broken down into Project Types and estimated indicative budget.
- b) The work is associated with risk factors such as lack of as-built information, dolomite related challenges and unknown existing services:
- b.1. Therefore, the Normal Service shall be expected to require engineering input that warrants a typical fee scale which lies between the median and upper percentages.
- b.2. Therefore, the bidder needs to consider the nature and extent of the bid, and select a percentage fee for the respective typical project according to the details given in item number (c) below.
- b.3. As a risk mitigation measure, all Offered Fees shall not fall more than 10% below the estimated ERWAT basic Fee.
- c) The anticipated Transport Infrastructure and Stormwater Management Projects, as per the provisions of Clause 4.3.1 of the ECSA guidelines shall fall under the Project Type Categories listed below, and broken down into Project Types, mean fee range percentages and respective indicative Budget:
- c.1. Category A Project Types:
- c.1.1. Project Types: Parking lots/Paved surfaces; Road Rehabilitation; New Paved Rural Roads; Stormwater Pipes (pre-cast units); Geotechnical underground structures and dredging.
- c.1.2. Indicative Budget: R 120 000 000.
- c.1.3. Mean Fee Range: typical range 6%-8%, accept 7.5% for this work.
- c.2. Category C Project Types:
- c.2.1. Project Types: New and Improved Unpaved Urban Roads; New and Improved Urban Roads; Stormwater Structures, Breakwaters and canals (designed).
- c.2.2. Indicative Budget: R 60 000 000.
- c.2.3. Mean Fee Range: typical range 8% - 10%, accept 9.5% for this work.
- d) The Bidder shall complete the pricing tables in full, and If no rate/fee is offered in the space provided in Activity Table, the bid will be disqualified and consequently be rejected, even if the rest of the table is completed.

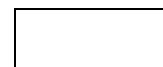
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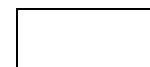
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

- e) The Pricing Tables contain reference clauses that relate to the items stipulated in the Scope of Works (e.g., C 3.3.1, Item 2.1) and ECSA Guidelines (e.g., ECSA Clause 3.3.1).
- f) **For Activity 3: Time Based**, the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in “Clause **C 3.1.2 Mandatory Requirements**” of the Scope of Works.
- g) **For Activity 1: Normal Services**,
- g.1. The proportion of the fees shall be based on clause 4.3.6 of the ECSA guidelines.
- g.2. a **Minimum** Offered Basic Fee that is not more than 10% below the estimated ERWAT basic fee will be accepted for all bids, the summary of the Project Types, applicable categories and fee scales, Indicative Project Budget and Estimated Basic Fee Percentage are given in the table below:

Summary of Project Types, Project Categories and Fee Scales, indicative Budget and Estimated Basic Fee Percentage.					
[Formula: Basic Percentage fee = (% Fee Cat + 16.3% - 100*(0.023 * log (Cost of Works))]					
Item	Project Type	Indicative Contract Amount	Mean Fee Range	ERWAT Basic fee	
				Basic %	Rand Value
1	Category A Project Types				
1.1	Parking lots/Paved surfaces;	R 120 000 000	7.5%	5.91%	R 6 264 000
1.2	Road Rehabilitation;				
1.3	New Paved Rural Roads;				
1.4	Stormwater Pipes (pre-cast units);				
1.5	Geotechnical underground structures and dredging				
2	Category C Project Types				
2.1	New and Improved Unpaved Urban Roads;	R 60 000 000	9.5%	8.32%	R 4 746 000
2.2	New and Improved Urban Roads;				
2.3	Stormwater Structures, Breakwaters and canals (designed).				

#### 2.1.1. SCHEDULE OF FEES FOR ACTIVITY 1: NORMAL SERVICES (ESCA Clause 4.3)

- 2.1.1.1. The bidder shall note that the indicative quantities, rates and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 2.1.1.2. The quantities and amounts in the schedule of fees below shall be solely indicative and will be used for evaluation purposes only.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- 2.1.1.3. As risk mitigation measure, Offered Basic Fees are deemed acceptable to a **Minimum** that is 10% below the estimated ERWAT basic Fee, and any Offer that falls below 10% shall not be acceptable.

SCHEDULE OF FEES FOR ACTIVITY 1 – NORMAL SERVICES FOR ROADS AND STORMWATER MANAGEMENT.						
Item	Project Type	Indicative Contract Amount	ERWAT Basic Fees		Offered Fees	
			% Basic	Rands	% Offer	Offered Fee (Rands)
1	Category A Project Types	R120 000 000	5.91%	R 6 264 000		
2	Category C Project Types	R 60 000 000	8.32%	R 4 746 000		
Indicative Subtotal for Fees Carried Forward to summary schedule for Roads and Stormwater Management Works						

#### 2.1.2. SCHEDULE FOR ADDITIONAL SERVICES: ACTIVITY 2 (ECSA Clause 4.4)

- 2.1.2.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 2.1.2.2. The quantities and amounts in the schedule for additional services below shall be solely indicative and will be used for evaluation purposes only.

ACTIVITY 3 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	Taking Over of Designs Done by other Consulting Engineers [ECSA Clause 3.3.1]	Prov. Sum Per Order	1	R 2000 000	R 2000 000
2.	Geotechnical Investigation	No	100		
3.	Line Survey	m	2000		
4.	Topographical Survey	m <sup>2</sup>	10 000		
5.	<b>DOLOMITE STABILITY INVESTIGATION</b> (in line with “ <b>Clause C3.2.3, item 2.8</b> ” of the Scope of Works, for a typical construction site, underlain with dolomite).				

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ACTIVITY 3 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
a)	Desktop studies and inception report	Sum Per Order	1		
b)	Site Preliminary and General requirements: <ul style="list-style-type: none"> <li>– Safety Files</li> <li>– Induction of Staff</li> </ul> Full PPE (boots and full site overalls)	Sum Per Order	1		
c)	Data Analysis and Preliminary Reporting	Sum Per Order	1		
d)	Geo-Science approval and Final Reporting	Sum Per Order	1		
e)	Presentations to client	No	10		
f)	Provision of Health and Safety	Sum Per Order	1		
g)	Drilling of boreholes and backfilling (i.e. using percussion drilling method, re-measurable after drill is complete)	No	60		
h)	Drilling 60-meter boreholes and backfilling	No	60		
i)	Drilling 40-meter boreholes and backfilling.	No	60		
j)	Laboratory Analysis of material	Sum Per Order	1		
k)	10-meter Grid Survey	Ha	10		
l)	30-meter Grid Survey	Ha	10		
m)	Excavation of Test pits, backfilling and Lab Analysis.	No	60		
n)	DCP Testing and Lab Analysis	No	60		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ACTIVITY 3 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
o)	DPSH Testing and Lab Analysis	No	60		
p)	Compaction Testing and Lab Analysis (CBR & Modified AASTHO)	No	60		
q)	Underground Service detection for Boreholes/Test Pits	No	60		
r)	Repairs of Broken pipes	Prov. Sum Per Order	1	R 1000 000	R 1000 000
s)	Handling Costs	%			
t)	Travelling Cost	Km	30 000		
u)	TLB Hire	Hr	200		
v)	Excavator Hire	Hr	200		
6.	<b>OTHER SPECIALIST SERVICES</b>				
a)	Provisional Sum for Other Specialist Services	Prov. Sum Per Order	1	R1 000 000	R1 000 000
b)	Handling/Administration fees	%			
7.	<b>CONSTRUCTION MONITORING</b>				
a)	Level 2: Part-time Construction Monitoring	Hrs	10 000		
b)	Level 3: Full-time Construction Monitoring	Hrs	30 000		
8.	<b>OCCUPATIONAL HEALTH AND SAFETY ACT, 1993(ACT NO.85 OF 1993) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO.107 OF 1998)</b>				
a)	Occupational Health and Safety Specification	No	20		
b)	Environmental Authorizations	No	10		
c)	Environmental Construction Monitoring	Monthly	36		
d)	OHS Construction Monitoring	Monthly	36		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ACTIVITY 3 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
Indicative Subtotal for Additional Services Carried Forward to summary schedule for Roads and Stormwater Management Works					

### 2.1.3.SCHEDULE OF RATES: ACTIVITY 3 TIME BASED FEES (ECSA Clause 4.2), RATES PER CATEGORY OF PROFESSIONAL PERSONNEL IN TERMS OF ECSA CLAUSE 4.2.2.

- 2.1.3.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 2.1.3.2. The quantities and amounts in the schedule of rates below shall be solely indicative and will be used for evaluation purposes only.
- 2.1.3.3. Bidders shall note that the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause **C 3.1.2 Mandatory Requirements**" of the Scope of Works.

SCHEDULE OF RATES (ACTIVITY 3 – TIME BASED FEES)					
ECSA Clause Ref. 4.2	Type of service	Unit	Indicating Quantity	Rate per unit	Total R (Excl. VAT)
<b>1. Professional Civil Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 1</b>					
<b>2. Professional Geotechnical Engineer/Technologist or Geologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 2</b>					
<b>3. Professional Land Surveyor</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D	Hrs	20 000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



	[Candidate Engineer]				
<b>Indicative Sub-Total 3</b>					
<b>4. Lead Consultant: Civil Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 4</b>					
<b>5. Principal Agent: Civil Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
<b>Indicative Sub-Total 5</b>					
<b>6. Professional Construction Project Manager</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Project Manager]	Hrs	20 000		
<b>Indicative Sub-Total 6</b>					
<b>Indicative Subtotal for Rate Based Fees Carried Forward to summary schedule for Roads and Stormwater Management Works</b>					

#### 2.1.4.SCHEDULE FOR EXPENSES AND COST: ACTIVITY 4 (ECSA Clause 4.6)

- 2.1.4.1. The bidder shall note that the indicative quantities, rates and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 2.1.4.2. The quantities and amounts in the schedule for expenses and costs below shall be solely indicative and will be used for evaluation purposes only.
- 2.1.4.3. All **Travelling and Subsistence** shall be compensated based on the **National Treasury** provisions for **Cost Containment Measures** as contained in **Circular No.82** of the **Municipal Finance Management Act No.56 of 2003**.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR EXPENSES AND COSTS (ACTIVITY 4 – EXPENSE AND COST)					
item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	A4 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	40 000		
2.	A3 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	40 000		
3.	A0 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
4.	Other Expenses [ECSA Clause 4.6.(1)]	Prov Sum	1	R 500 000	
<b>Indicative Subtotal for Cost Based Fees Carried Forward to summary schedule for Roads and Stormwater Management Works</b>					

## 2.1.5.SUMMARY PRICE SCHEDULE FOR PROFESSIONAL ROADS AND STORMWATER MANAGEMENT

SUMMARY PRICE SCHEDULE FOR PROFESSIONAL FEES	
Schedule Of Fees: Activity 1: Normal Services.	R
Schedule For Additional Services: Activity 2.	R
Schedule Of Rates: Activity 3	R
Schedule For Expenses and Cost: Activity 4.	R
<b>TOTAL INDICATIVE PROFESSIONAL FEES FOR ROADS AND STORMWATER MANAGEMENT</b>	<b>R</b>
<b>NB: THE ABOVE-MENTIONED BID PRICE IS SOLELY INDICATIVE AND WILL BE USED FOR EVALUATION PURPOSES ONLY.</b>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

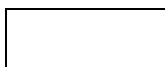
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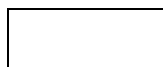
### 3. DISCIPLINE: BUILDING WORKS

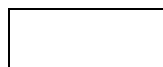
#### General

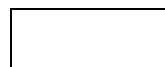
- a) The Consulting Engineer is to tender a percentage fees in terms of the the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act , 2000 (Act No. 46 of 200) Board Notice 138 of 2015 Government Gazette No. 39480, dated 4 December 2015 by Engineering Council of South Africa (ECSA), upon a typical **R 200 000 000** "Indicative Cost of Works" for Building Works broken down into Project Types and estimated indicative budget.
- b) The work is associated with risk factors such as lack of as-built information, dolomite related challenges and unknown existing services:
- b.1. Therefore, the Normal Service shall be expected to require engineering input that warrants a typical fee scale which lies between the median and upper percentages.
- b.2. Therefore, the bidder needs to consider the nature and extent of the bid, and select a percentage fee for the respective typical project according to the details given in item number (c) below.
- b.3. As a risk mitigation measure, all Offered Fees shall not fall more than 10% below the estimated ERWAT basic Fee.
- c) The anticipated Building Projects, as per the provisions of Clause 4.3.1 of the ECSA guidelines shall fall under the Project Type Categories listed below, and broken down into Project Types, mean fee range percentages and respective Budget:
- c.1. Category A Project Types:
- c.1.1. Project Types: Parking lots/Paved surfaces; Stormwater Pipes (pre-cast units); Geotechnical underground structures and dredging.
- c.1.2. Indicative Budget: R 50 000 000.
- c.1.3. Mean Fee Range: typical range 6% - 8%, accept 7.5% for this work.
- c.2. Category C Project Types:
- c.2.1. Project Types: Building Civils, Municipal Service.
- c.2.2. Indicative Budget: R 50 000 000.
- c.2.3. Mean Fee Range: typical range 8% - 10%, accept 9.5% for this work.
- c.3. Category E Project Types:
- c.3.1. Project Types: Building Structural i.e., Offices and Industrial, Mechanical and Electrical Engineering Building Services.
- c.3.2. Indicative Budget: R 50 000 000.
- c.3.3. Mean Fee Range: typical range 10% - 13%, accept 12% for this work.

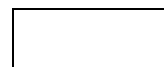
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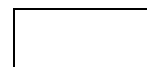
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

c.4. Category F Project Types:

c.4.1. Project Types: Building Structural Alterations, Specialized Buildings, Specialized Mechanical and Electrical Engineering Services.

c.4.2. Indicative Budget: R 50 000 000.

c.4.3. Mean Fee Range: typical range 12% - 15%, accept 14% for this work.

d) The Bidder shall complete the pricing tables in full, and If no rate/fee is offered in the space provided in Activity Table, the bid will be disqualified and consequently be rejected, even if the rest of the table is completed.

e) The Pricing Tables contain reference clauses that relate to items stipulated in the Scope of Works (e.g., C 3.3.1, Item 2.1) and ECSA Guidelines (e.g., ECSA Clause 3.3.1).

f) **For Activity 3: Time Based**, the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause **C 3.1.2 Mandatory Requirements**" of the Scope of Works.

g) **For Activity 1: Normal Services**,

g.1. The proportion of the fees shall be based on clause 4.3.6 of the ECSA guidelines.

g.2. a **Minimum** Offered Basic Fee that is not more than 10% below the estimated ERWAT basic fee will be accepted for all bids, the summary of the Project Types, applicable categories and fee scales, Indicative Project Budget and Estimated Basic Fee Percentage are given in the table below:

Summary of Project Types, Project Categories and Fee Scales, indicative Budget and Estimated Basic Fee Percentage.					
[Formula: Basic Percentage fee = (% Fee Cat + 16.3% - 100*(0.023 * log (Cost of Works))]					
Item	Project Type	Indicative Contract Amount	Mean Fee Range	ERWAT Basic fee	
				Basic %	Rand Value
1	Category A Project Types				
1.1	Parking lots/Paved surfaces;	R 50 000 000	7.5%	6.09%	R 3 045 000
1.2	Stormwater Pipes (pre-cast units);				
1.3	Geotechnical underground structures and dredging.				
2	Category C Project Types				
2.1	Building Civils;	R 50 000 000	9.5%	8.09%	R 4 045 000
2.2	Municipal Service.				

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

3	Category E Project Types				
3.1	Building Structural i.e Offices and Industrial;	R 50 000 000	12%	10.59%	R 5 295 000
3.2	Mechanical and Electrical Engineering Building Services				
4	Category F Project Types				
4.1	Building Structural Alterations;	R 50 000 000	15%	13.59%	R 6 795 000
4.2	Specialized Buildings;				
4.3	Specialized Mechanical and Electrical Engineering Services.				

### 3.1.1.SCHEDULE OF FEES FOR ACTIVITY 1: NORMAL SERVICES (ESCA Clause 4.3)

- 3.1.1.1. The bidder shall note that the indicative quantities, rates and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 3.1.1.2. The quantities and amounts in the schedule of fees below shall be solely indicative and will be used for evaluation purposes only.
- 3.1.1.3. As risk mitigation measure, Offered Basic Fees are deemed acceptable to a **Minimum that is 10% below the estimated ERWAT basic Fee**, and any Offer that falls below 10% shall not be acceptable.

SCHEDULE OF FEES FOR ACTIVITY 1 – NORMAL SERVICES FOR ROADS AND BUILDING WORKS						
Item	Project Type	Indicative Contract Amount	ERWAT Basic Fees		Offered Fees	
			% Basic	Rands	% Offer	Offered Fee (Rands)
<b>1</b>	<b>Category A Project Types</b>	R 50 000 000	6.09%	R 3 045 000		
<b>2</b>	<b>Category C Project Types</b>	R 50 000 000	8.09%	R 4 045 000		
<b>3</b>	<b>Category E Project Types</b>	R 50 000 000	10.59%	R 5 295 000		
<b>4</b>	<b>Category F Project Types</b>	R 50 000 000	13.59%	R 6 795 000		
<b>Indicative Subtotal for Cost Based Fees Carried Forward to summary schedule for Building Works</b>						

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### 3.1.2.SCHEDULE FOR ADDITIONAL SERVICES: ACTIVITY 2 (ECSA Clause 4.4)

3.1.2.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.

3.1.2.2. The quantities and amounts in the schedule for additional services below shall be solely indicative and will be used for evaluation purposes only.

ACTIVITY 2 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	Taking Over of Designs Done by other Consulting Engineers [ECSA Clause 3.3.1]	Prov. Sum Per Order	1	R 2000 000	R 2000 000
2.	<b>GEOTECHNICAL INVESTIGATION</b> (inclusive of all necessary Tests, Laboratory Services, Analysis and Reporting) [ECSA Clause 3.3.1]				
a)	Foundation Stability Investigations of Existing Buildings (i.e offices and laboratories)	No	2000		
b)	Foundation design of new buildings	No	2000		
3.	<b>DOLOMITE STABILITY INVESTIGATION</b> (in line with "Clause C3.2.3, item 2.8" of the Scope of Works, for a typical construction site, underlain with dolomite).				
a)	Desktop studies and inception report	Sum Per Order	1		
b)	Site Preliminary and General requirements: – Safety Files – Induction of Staff – Full PPE (boots and full site overalls)	Sum Per Order	1		
c)	Data Analysis and Preliminary Reporting	Sum Per Order	1		
d)	Geo-Science approval and Final Reporting	Sum Per Order	1		
e)	Presentations to client	No	10		
f)	Provision of Health and Safety	Sum Per Order	1		
g)	Drilling of boreholes and backfilling ( i.e. using	No	30		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ACTIVITY 2 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
	percussion drilling method, re-measurable after drill is complete)				
g.1	Drilling 60-meter boreholes and backfilling	No	30		
g.2	Drilling 40-meter boreholes and backfilling.	No	30		
g.3	Laboratory Analysis of material	Sum Per Order	1		
h)	Gravity survey				
h.1	10-meter Grid Survey	Ha	15		
h.2	30-meter Grid Survey	Ha	15		
i)	Excavation of Test pits, backfilling and Lab Analysis.	No	1000		
j)	DCP Testing and Lab Analysis	No	1000		
k)	DPSH Testing and Lab Analysis	No	1000		
l)	Compaction Testing and Lab Analysis (CBR & Modified AASTHO)	No	1000		
m)	Underground Service detection for Boreholes/Test Pits	No	30		
n)	Repairs of Broken pipes	Prov. Sum Per Order	1	R 200 000	R 200 000
o)	Handling Costs for (n) above	%			
p)	Travelling Cost	Km	30 000		
q)	TLB Hire	Hr	420		
r)	Excavator Hire	Hr	420		
4.	<b>STRUCTURAL CONDITION ASSESSMENT FOR HARDENED RC STRUCTURAL CONCRETE</b> (Inclusive of all Sample extraction/Field Work, Laboratory Testing, Analysis and Reporting) [ Clause C3.2.3, Item No 2.5.1]				
a)	<b>Destructive Strength Testing (in line with item 2.5.1 (a))</b>				
a.1	Concrete Core drilling and Testing	No	1000		
a.2	Tensile Strength Test	No	1000		

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ACTIVITY 2 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
<b>b) Non-Destructive Strength Testing (in line with item 2.5.1 (b))</b>					
b.1	Steel Pull Out Test	No	1000		
b.2	Rebound Hammer	No	1000		
b.3	Ultrasonic Pulse Velocity	No	1000		
b.4	Penetration Resistance Test	m <sup>2</sup>	1000		
b.5	Crack widths and depths	m <sup>2</sup>	1000		
b.6	Water Permeability	m <sup>2</sup>	1000		
b.7	Reinforcement Scanning	m <sup>2</sup>	1000		
b.8	Electrochemical Potential of Reinforcement	No	1000		
<b>c) Chemical Testing (in line with item 2.5.1 (c))</b>					
c.1	Carbonation Test	No	1000		
c.2	Chloride Content Test	No	1000		
c.3	Sulphate Content Test	No	1000		
c.4	Alkali Content Test	No	1000		
c.5	Cement Content and Type	No	1000		
5.	<b>HYDRAULICS TESTING</b>				
a)	7 Days Flow Logging (Aligned to item 2.5.2.2)	No	100		
b)	7 Days Pressure Logging (Aligned to item 2.5.2.3)	No	100		
c)	7 Days Sewer Flow Logging (Aligned to item 2.5.2.3)	No	100		
6.	<b>ENVIRONMENTAL AUTHORIZATIONS</b> (in line with "Clause C3.2.3, item 2.9" of the Scope of Works, for a Typical Construction of a Wastewater Treatment Works)				
a)	<b>Environmental Impact Assessment Process</b>				
a.1	EIA Application Phase (in line with "item 2.9.1.2.1" of the Scope of Works)	Sum Per Order	1		
a.2	Basic Assessment (in line with "item 2.9.1.2.2" of the Scope of Works)	Sum Per Order	1		
a.3	Scoping and EIA Process (in line with "item 2.9.1.2.3" of the Scope of Works)	Sum Per Order	1		
b)	<b>Environmental Specialist Studies</b>				

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



ACTIVITY 2 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
b.1	Archaeological and Cultural Heritage Assessment	Hr	5000		
b.2	Ecological/Wetland/Biodiversity Assessment	Hr	5000		
b.3	Hydrological/Geo-Hydrologic Assessment	Hr	5000		
b.4	Geotechnical Assessment	Hr	5000		
b.5	Socio-Economic Assessment	Hr	5000		
b.6	Air Quality Assessment	Sum Per Order	1		
b.7	Noise Assessment	Sum Per Order	1		
c)	<b>SPECIALIST STUDIES AND INVESTIGATIONS</b>				
c.1	CCTV for pipes between 150 up to 250mm diameter	m	1000		
c.2	CCTV for pipes greater than 250 up to 350mm diameter	m	1000		
c.3	CCTV for pipes between 350 up to 450mm diameter	m	1000		
c.4	CCTV for pipes greater than 450 up to 650mm diameter	m	1000		
c.5	CCTV for pipes greater than 650 mm diameter	m	1000		
c.6	Survey	m <sup>2</sup>	1000		
c.7	Topographical Survey	m <sup>2</sup>	10 000		
c.8	Provisional Sum for Other Specialist Services	Prov. Sum Per Order	1	R1 000 000	R1 000 000
c.9	Handling/Administration fee	%			
7.	<b>CONSTRUCTION MONITORING</b>				
a)	Level 2: Part-time Construction Monitoring	Hrs	10 000		
b)	Level 3: Full-time Construction Monitoring	Hrs	30 000		
8.	<b>OCCUPATIONAL HEALTH AND SAFETY ACT, 1993(ACT NO.85 OF 1993) AND NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO.107 OF 1998)</b>				

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

ACTIVITY 2 - ADDITIONAL SERVICES					
Item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
a)	Occupational Health and Safety Specification	No	1000		
b)	Environmental Construction Monitoring	Monthly	36		
c)	OHS Construction Monitoring	Monthly	36		
Indicative Subtotal for Additional Services Carried Forward to summary schedule for Building Works					

### 3.1.3.SCHEDULE OF RATES: ACTIVITY 3 TIME BASED FEES (ECSA Clause 4.2), RATES PER CATEGORY OF PROFESSIONAL PERSONNEL IN TERMS OF ECSA CLAUSE 4.2.2.

- 3.1.3.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 3.1.3.2. The quantities and amounts in the schedule of rates below shall be solely indicative and will be used for evaluation purposes only.
- 3.1.3.3. Bidders shall note that the experience of all the Categories of the Engineering Personnel (as described in Clause 4.2.2 of the ECSA guidelines) shall be based on work of the same nature as described in "Clause C 3.1.2 Mandatory Requirements" of the Scope of Works.

SCHEDULE OF RATES (ACTIVITY 3 – TIME BASED FEES)					
ECSA Clause Ref. 4.2	Type of service	Unit	Indicative Quantity	Rate per unit	Total R (Excl. VAT)
<b>1. Professional Civil Engineer/Technologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
Indicative Sub - Total 1					
<b>2. Professional Geotechnical Engineer/Technologist or Geologist</b>					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
Indicative Sub - Total 2					

Contractor

Witness 1

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3. Professional Land Surveyor					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Surveyor]	Hrs	20 000		
Indicative Sub - Total 3					
4. Lead Consultant: Civil Engineer/Technologist					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
Indicative Sub - Total 4					
5. Principal Agent: Civil Engineer/Technologist					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Engineer]	Hrs	20 000		
Indicative Sub - Total 5					
6. Professional Construction Project Manager:					
4.2.2(a)	Category A	Hrs	10 000		
4.2.2(b)	Category B	Hrs	15 000		
4.2.2(c)	Category C	Hrs	20 000		
4.2.2(d)	Category D [Candidate Project Manager]	Hrs	20 000		
Indicative Sub - Total 6					
Indicative Subtotal for Rate Based Fees Carried Forward to summary schedule for Building Works					

### 3.1.4.SCHEDULE FOR EXPENSES AND COST: ACTIVITY 4 (ECSA Clause 4.6)

- 3.1.4.1. The bidder shall note that the indicative quantities and amounts shall be applicable for each **Works Order/IPW** issued at a time and should not be deemed to be the Total quantities and amounts for the entire **Framework Contract**.
- 3.1.4.2. The quantities and amounts in the schedule for expenses and costs below shall be solely indicative and will be used for evaluation purposes only.
- 3.1.4.3. All Travelling and Subsistence shall be compensated based on the **National Treasury** provisions for **Cost Containment Measures** as contained in **Circular No.82 of the Municipal Finance Management Act No.56 of 2003**.

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SCHEDULE FOR EXPENSES AND COSTS (ACTIVITY 4 – EXPENSE AND COST)					
item	Activity Description	Unit	Indicative Quantity	Rate per Unit	Total R (Excl. VAT)
1.	A4 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	40 000		
2.	A3 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
3.	A0 Reproductions, copying, printing, artwork, photography and binding, etc. of all contracts documents [ECSA Clause 4.6(2)(f)]	Pages	20 000		
4.	Other Expenses [ECSA Clause 4.6.(1)]	Prov. Sum	1	R 500 000	
<b>Indicative Subtotal for Cost and Expenses Fees Carried Forward to summary schedule for Building Works</b>					

### 3.1.5.SUMMARY PRICE SCHEDULE FOR PROFESSIONAL BUILDING WORKS

SUMMARY PRICE SCHEDULE FOR PROFESSIONAL FEES	
Schedule Of Fees: Activity 1: Normal Services.	R
Schedule For Additional Services: Activity 2.	R
Schedule Of Rates: Activity 3	R
Schedule For Expenses and Cost: Activity 4.	R
<b>INDICATIVE TOTAL PROFESSIONAL FEES FOR BUILDING WORKS</b>	<b>R</b>
<b>NB: THE ABOVE-MENTIONED BID PRICE IS SOLELY INDICATIVE AND WILL BE USED FOR EVALUATION PURPOSES ONLY.</b>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2




PROJECT NO: ERW2211/02


THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS

C3 SCOPE OF WORK

	SECTION HEADING:	COLOUR
C3	Scope of Work	BLUE
C3.1	Description of work	
C3.2	Engineering	


  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

DETAILED CONTENTS

PART C3 SCOPE OF WORKS

C3.1	Description of works
C3.1.1	Objective of the Employer
C3.1.2	Mandatory Requirements
C3.1.3	Purpose of Programme and Outcomes
C3.1.4	Extent of the Works
C3.1.5	Location of the Works
C3.2	Engineering
C3.2.1	Project Stages
C3.2.1	Project Scope
C3.2.3	Project Specifications
C3.2.5	Copyright/Patent Rights

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### **C 3.1 DESCRIPTION OF WORKS (SERVICES)**

#### **C 3.1.1 OBJECTIVE OF THE EMPLOYER**

ERWAT is seeking to establish a thirty-six (36) months Professional Services Framework Agreement with competent professional service providers to render engineering services for ERWAT infrastructure projects on “As-and-When Required” basis in line with the Guideline Scope of Services, clause 3 of the ECSA Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 200) Board Notice 138 of 2015 Government Gazette No. 39480, dated 4 December 2015.

The Professional Services Framework Agreement shall follow the standard definition and conditions of Framework Agreements as contained in the National Treasury documents for Infrastructure Procurement and Delivery Management (SIPDM). The Employer does not bind itself to the Service Providers to issue a minimum or maximum quantum of work/services or fee value of work/services during the term of the Framework Agreement, therefore when the Framework Agreement is awarded or concluded it shall have a zero-contract price or zero-volume of specified works/services attached. The Service Provider shall note that the intention of the Employer is to set up a Professional Services Framework Agreement for a contract term of thirty-six (36) months to ensure that as-and-when the Employer requires services scoped per this contract; the Service Provider is in position, without delay to render such services.

The framework agreement, shall roll out a thirty six (36) months infrastructure delivery programme which will mainly include planning investigations, feasibility studies, preliminary design reports (PDRs), detail designs, obtaining Environmental Authorisation (EA) through environmental impact assessment (EIA) processes, obtaining Water Use Licence Authorization (WULA), prepare procurement and construction documentation, manage construction contracts, administer construction contracts, monitoring construction, fulfilling and completing the project close-out report of various Wastewater Treatment infrastructure projects.

The programme will also have a fare focus on contract administration, construction monitoring, contract management, preparation of as built drawings, close out and hand-over reports. Depending on the nature of the project/s and duration taken to undertake certain preceding activities, the scope of the appointment/s in each component of the programme may vary to suit the individual project/s progress. All the appointments under this programme shall comply with the MFMA for three financial years, per project.


#### **C 3.1.2 MANDATORY REQUIREMENTS**


##### **C 3.1.2.1 MINIMUM REQUIREMENTS**


The professional service provider shall be expected to comply with the minimum requirements stipulated for each respective disciplines listed below during the tender stages of this bid.


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Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

## 1. WASTEWATER INFRASTRUCTURE

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
Staffing profile	<b>1 x Professional Structural Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <b>1 x Professional Structural Technologist /Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures projects, with more than 5 years' structural design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <b>1 x Structural Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures related projects.</li> </ul>	
	<b>1 x Professional Geotechnical Engineer or Geologist.</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering/Geotechnical engineering (BSC/BEng) or Geology</li> <li>Minimum of 10 years' experience in the geotechnical designs of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or liquid retaining structural projects, with more than 5 years' geotechnical design experience.</li> <li>Professional registration with ECSA or SACNASP for at least five (5) years.</li> </ul>	
	<b>1 x Professional Hydraulics Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <b>1 x Professional Hydraulics Technologist /Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
	<b>1 x Hydraulics Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the Hydraulic design of Bulk sewer pipes and Wastewater Treatment or Water Treatment works.</li> </ul>	
	<b>1x Professional Process Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <b>1x Professional Process Technologist/Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <b>1 x Process Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.</li> </ul>	
	<b>1 x Professional Mechanical Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <b>1 x Professional Mechanical Technologist /Engineer</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <b>1 x Mechanical Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure or similar industrial Mechanical Infrastructure.</li> </ul>	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
	<p><b>1 x Professional Electrical Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation Electrical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Electrical Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation Electrical infrastructure.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	
	<p><b>1x Professional Control and Instrumentation Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical/Electronic Engineering (BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1x Professional Control and Instrumentation Technologist /Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical/Electronic Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	
	<p><b>1 x Professional Construction Project Manager</b></p> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 10 years' experience in Management and Administration of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure Projects.</li> <li>Professional registration with SACPCMP or PMP for at least five (5) years.</li> </ul>	
<b>Previous relevant company experience</b>	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction (ECSA Stages 1 to 6) of Wastewater Treatment or Water Treatment or Bulk Water or Wastewater retaining infrastructure for a minimum total of R 25 million per project (Total project value).	
<b>Financial ability to execute the contract.</b>	A Minimum Turn-Over of R 10 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
(three years (3) financial statements)		
Company Registration	Company registered and in Operation for four (4) years, with a minimum turn-over of R 5 000 000 for the latest three (3) consecutive financial years.	

### **REQUIRED DOCUMENTS:**

**Bidders are required submitting the following documents with their bids:**

#### **1xProfessional Structural Engineer:**

- Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)
- CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.
- Copy of ECSA Professional registration certificate.

#### **1xProfessional Structural Technologist /Engineer:**

- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structures, with more than 5 years' structural design experience.
- Copy of ECSA Professional registration certificate.

#### **1x Structural Engineer/Technologist:**

- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or any other design project of similar nature and complexity.

#### **1 x Professional Hydraulics Engineer:**


- Copy of Bachelor's Degree in Civil Engineering (BSC/BEng)
- CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.
- Professional registration with ECSA for at least five (5) years.


#### **1 x Professional Hydraulics Technologist/ Engineer:**


- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating minimum of 10 years' experience in bulk water or wastewater hydraulics design related projects, with more than 5 years' in bulk sewer and wastewater hydraulics design experience.
- Professional registration with ECSA for at least five (5) years.


#### **1x Hydraulics Engineer/Technologist:**


- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in structural design of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects.


  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

**1 x Professional Geotechnical Engineer/Geologist:**

- Copy of Bachelor's Degree in Civil Engineering/Geotechnical engineering (BSC/BEng) or Geology
- CV demonstrating minimum of 10 years' experience in the geotechnical designs of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining structural projects or liquid retaining structural projects, with more than 5 years' geotechnical design experience.
- Copy of Professional registration with ECSA or SACNASP for at least five (5) years

**1 x Professional Process Engineer:**

- Copy of Bachelor's Degree in Civil/Chemical Engineering (BSC/BEng)
- CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.
- Copy of ECSA Professional registration certificate.

**1 x Professional Process Technologist/Engineer:**

- Copy of Bachelor's Degree in Civil/Chemical Engineering (BTech/BSC/BEng)
- CV demonstrating minimum of 10 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.
- Copy of ECSA Professional registration certificate.

**1x Process Engineer/Technologist:**

- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 5 years' experience in the process design/evaluation of Wastewater Treatment or Water Treatment related projects.

**1 x Professional Mechanical Engineer:**

- Copy of Bachelor's Degree in Mechanical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.
- Professional registration with ECSA for at least five (5) years.

**1 x Professional Mechanical Technologist/Engineer:**

- Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment Mechanical infrastructure.
- Professional registration with ECSA for at least five (5) years.

**1 x Mechanical Engineer/Technologist:**

- Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 5 years' experience in the design of Wastewater Treatment or Water Treatment mechanical infrastructure.

**1 x Professional Electrical Engineer:**

- Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.
- Copy of ECSA Professional registration certificate

**1 x Professional Electrical Technologist/Engineer:**

- Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

- CV demonstrating Minimum of 10 years' experience in the design of Wastewater Treatment or Water Treatment or MV/LV reticulation.
- Copy of ECSA Professional registration certificate

**1x Professional Control and Instrumentation Engineer:**

- Copy of Bachelor's Degree in Electrical Engineering (BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.
- Copy of ECSA Professional registration certificate.

**1x Professional Control and Instrumentation Technologist/Engineer:**

- Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating Minimum of 10 years' experience in the design of control and Instrumentation infrastructure of Wastewater Treatment works or Water Treatment works.
- Copy of ECSA Professional registration certificate.

**1x Professional Construction Project Manager:**

- Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 3 years' experience in Management and Administration of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure projects or any other construction project of similar nature and complexity.
- Copy of SACPCMP or PMP certificate.

**Previous relevant company experience:**

- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction (ECSA stages 1 to 6) of Wastewater Treatment or Water Treatment or Bulk Water/Wastewater retaining infrastructure for a minimum total of R 25 million per project (Total project value).

**Financial Ability/Capacity:**

- Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act.

**Company Registration:**

- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

**Failure to submit the above with the bid document will render the bid non-responsive.**

**Please Note:**

1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.
2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.
3. The Employer may appoint the same company for more than one discipline.

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2

## 2. ROADS AND STORMWATER MANAGEMENT

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
Staffing profile	<b>1 x Professional Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 10 years' experience in pavement design or stormwater management related projects, with more than 5 years' pavement design experience.</li> <li>Professional registration with ECSA for at least five (5) years.</li> </ul>	
	<b>1 x Civil Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in pavement design or stormwater related projects, with more than 5 years' pavement design experience.</li> </ul>	
	<b>1 x Professional Land Surveyor</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Land Survey</li> <li>Minimum of 5 years' experience in land survey related projects.</li> <li>Professional registration with SAGC for at least three (3) years.</li> </ul>	
	<b>1 x Professional Construction Project Manager</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 5 years' experience in Management and Administration of pavement and stormwater management projects</li> <li>Professional registration with SACPCMP or PMP at least three (3) years</li> </ul>	
Previous relevant company experience	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design of pavement/roads related projects.	
Financial ability to execute the contract. (three years (3) financial statements)	A Minimum Turn-Over of R 1 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).	
Company Registration	Company registered and in Operation for four (4) years, with a minimum turn-over of R 500 000 for the latest three (3) consecutive financial years.	

### REQUIRED DOCUMENTS:

Bidders are required submitting the following documents with their bids:

#### 1 x Professional Engineer/Technologist

- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- CV demonstrating a minimum of 10 years' experience in pavement design or stormwater management related projects, with more than 5 years' pavement design experience.
- Copy of Professional registration with ECSA for at least five (5) years.

**1 x Civil Engineer/Technologist**

- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- Minimum of 5 years' experience in pavement design or stormwater related projects, with more than 5 years' pavement design experience.

**1x Professional Land Surveyor:**

- Copy of Bachelor's Degree in Land Survey
- CV demonstrating a minimum of 5 years' experience in land survey related projects.
- Copy of Professional registration with SAGC for at least three (3) years.

**1x Professional Construction Project Manager:**

- Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 5 years' experience in Management and Administration of pavement and stormwater management projects
- Copy of SACPCMP or PMP certificate.

**Previous relevant company experience:**

- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in pavement design projects.

**Financial Ability/Capacity**

- Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act

**Company Registration:**

- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

**Failure to submit the above with the bid document will render the bid non-responsive**

**Please Note:**

1. The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.
2. Bidders may opt to submit a bid for any or all of the disciplines of the required services.
3. The Employer may appoint the same company for more than one discipline.

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Contractor



Witness 1



Witness 2



Employer



Witness 1



Witness 2



### 3. BUILDING WORKS

EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
Staffing profile	<b>1 x Professional Architecture</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Architecture</li> <li>Minimum of 5 years' experience in the Architectural design/practice of building related projects.</li> <li>Professional registration with SACAP for at least three (3) years.</li> </ul>	
	<b>1 x Professional Quantity Surveyor</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Quantity Survey</li> <li>Minimum of 5 years' experience in building related projects</li> <li>Professional registration with SACQSP for at least three (3) years.</li> </ul>	
	<b>1 x Professional Structural Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in building projects.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul>	
	<b>1 x Professional Mechanical Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related or similar mechanical Infrastructure.</li> <li>mechanical infrastructure Professional registration with ECSA for at least three (3) years.</li> </ul>	
	<b>1 x Professional Electrical Engineer/Technologist</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)</li> <li>Minimum of 5 years' experience in the design of building related electrical infrastructure or similar Electrical infrastructure.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul>	
	<b>1 x Professional Construction Project Manager</b> <ul style="list-style-type: none"> <li>Bachelor's Degree in the Built Environment.</li> <li>Minimum of 3 years' experience in Management and Administration of Building Related Projects.</li> <li>Professional registration with SACPCMP or PMP for at least three (3) years.</li> </ul>	
Previous relevant company experience	A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings	
Financial ability to execute the contract. three years (3)	A Minimum Turn-Over of R 1 000 000 in the most recent Financial Year (the Financial Years shall be determined according to the Company registration).	

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2



EVALUATION ASPECT	MINIMUM REQUIREMENT	YES/NO
financial statements)		
Company Registration	Company registered and in Operation for four (4) years, with a minimum turn-over of R 500 000 for the latest three (3) consecutive financial years.	

### **REQUIRED DOCUMENTS:**

**Bidders are required submitting the following documents with their bids:**

#### **1 x Professional Architecture**

- Bachelor's Degree in Architecture
- Cv demonstrating Minimum of 5 years' experience in the Architectural design/practice of building related projects.
- Copy Professional registration with SACAP .

#### **1 x Professional Quantity Surveyor**

- Bachelor's Degree in Quantity Survey
- CV demonstrating minimum of 5 years' experience in building related projects
- Copy of Professional registration with SACQSP .

#### **1x Professional Structural Engineer/Technologist:**

- Copy of Bachelor's Degree in Civil Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in building infrastructure projects.
- Copy of ECSA Professional registration certificate.

#### **1x Professional Mechanical Engineer/Technologist:**

- Copy of Bachelor's Degree in Mechanical Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience building related mechanical infrastructure projects.
- Copy of ECSA Professional registration certificate.

#### **1x Professional Electrical Engineer/Technologist:**

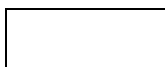
- Copy of Bachelor's Degree in Electrical Engineering (BTech/BSC/BEng)
- CV demonstrating a minimum of 5 years' experience in building related electrical infrastructure projects.
- Copy of ECSA Professional registration certificate.

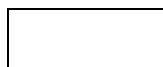
#### **1xProfessional Construction Project Manager:**

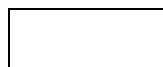
- Copy of Bachelor's Degree in the Built Environment
- CV demonstrating a minimum of 5 years' experience in Management and Administration of Water and Sanitation Related Projects.
- Copy of SACPCMP or PMP certificate.

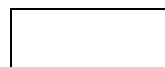
#### **Previous relevant company experience:**

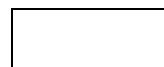
- A minimum of four (4) appointment and reference letters where bidder rendered consultation services in design and construction of at least two storey buildings.

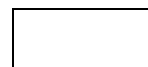
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

### **Financial Ability/Capacity**

- Copy of three (3) year audited financial statements, the financial years measured relative to the to the company registration. Annual financial statements submitted must comply with the requirements of the Companies Act or the Close Corporations Act

### **Company Registration:**

- Copy of Company Registration Documents (CIPC, Pty, CC, etc.)

**Failure to submit the above with the bid document will render the bid non-responsive**

### **Please Note:**

1. **The Professional Engineer/Technologist as per the minimum requirements is only limited to two (2) disciplines (refer to Scope of Work clause C3.1.4). Should the same Professional Engineer/Technologist be submitted for more than two (2) disciplines, the bid will be rejected.**
2. **Bidders may opt to submit a bid for any or all of the disciplines of the required services.**
3. **The Employer may appoint the same company for more than one discipline.**

### **C 3.1.2.2 ADDITIONAL REQUIREMENTS**

The additional requirements shall not form part of the requirements of the tender during the bidding stage, i.e., shall not have any evaluation implications during the tender stage. The additional requirements shall only apply after the award phase of the tender, all awarded bidders shall be affected by the additional requirements that are stipulated for the disciplines that have been awarded to that respective bidder.

The additional requirements are mainly stipulated as a means to comprehensively address the full extent of the scope of works. The complete scope of the ERWAT projects requires multiple disciplines of professional services, however, some of the disciplines will not be deployed often enough to warrant entering into a formal contract agreement with such specialist companies; therefore, the awarded Professional Service Providers will be expected to outsource such services under their respective disciplines on as and when required basis. It is not possible to exhaustively anticipate all the specialist that will be required during the term of the Framework agreement, therefore all the specialist listed in the table below and all such other specialists that may be requested through an Instruction to Perform Work (IPW) shall form part of the additional requirements. ERWAT shall expect the Professional Service Providers to comply with the minimum requirements stipulated for each of the specialists' services as defined in the table below or the Instruction to Perform Work (IPW) as and when issued.

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Contractor

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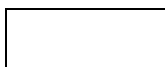
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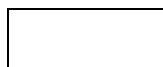
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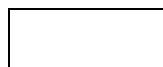
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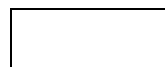
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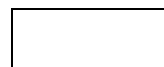
CATEGORY	MINIMUM REQUIREMENT
WASTEWATER INFRASTRUCTURE	<p><b><u>ENGINEERING MANAGEMENT/PRINCIPAL CONSULTANT</u></b></p> <p><b>Professional Civil Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Civil Engineering</li> <li>• Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water Storage related projects or multidisciplinary engineering projects as Programme Manager.</li> <li>• Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>Professional Mechanical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Mechanical Engineering</li> <li>• Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water Storage related projects or multidisciplinary engineering projects as Programme Manager.</li> <li>• Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>Professional Electrical Engineer/Technologist</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Electrical Engineering</li> <li>• Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water Storage related projects or multidisciplinary engineering projects as Programme Manager.</li> <li>• Professional registration with ECSA for at least five (5) years.</li> </ul> <p><b>1 x Professional Process Engineer</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Chemical/Civil Engineering</li> <li>• Minimum of 10 years' experience in Wastewater Treatment or Water Treatment or Bulk Water Storage related projects or multidisciplinary engineering projects as Programme Manager.</li> <li>• Professional registration with ECSA for at least five (5) years.</li> </ul>
	<p><b><u>BUILT ENVIRONMENT</u></b></p> <p><b>Contracts Management Specialist</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Civil Engineering/ Construction Management</li> <li>• Minimum of 10 years' experience in Engineering and Construction contracts management (i.e., NEC, JBCC, FIDIC, GCC, Standard Professional Services).</li> <li>• Proven track record of contract dispute resolution i.e Mediation, Arbitration and Litigation proceedings.</li> <li>• Professional registration with relevant regulatory body.</li> </ul> <p><b>Business Processes Specialist</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in industrial engineering</li> <li>• Minimum of 10 years' experience in the setting up of business processes.</li> <li>• Professional registration with ECSA for at least three (3) years.</li> </ul>

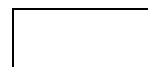
  
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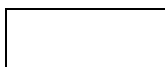
  
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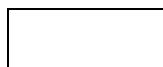
  
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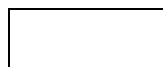
  
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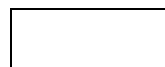
  
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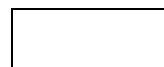
CATEGORY	MINIMUM REQUIREMENT
	<p><b>Town Planning Services</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Civil Engineering/Town Planning</li> <li>• Minimum of 10 years' experience in municipal town planning processes, laws, ordinances, schemes and policies.</li> <li>• Proven experience in determining municipal service charges for wastewater treatment infrastructure.</li> <li>• Proven experience in municipal property valuation</li> </ul> <p><b>Construction Estimator</b></p> <ul style="list-style-type: none"> <li>• Bachelor's degree in Quantity Survey/ Engineering</li> <li>• Minimum of 10 years' experience in construction estimation of multi-disciplinary infrastructure projects.</li> <li>• Professional registration with ECSA or SACQSP for at least three (3) years.</li> </ul> <p><b>Draughts Man</b></p> <ul style="list-style-type: none"> <li>• Certificate in engineering draughting</li> <li>• Minimum 10 years experience in draughting and detailing of Civil, Structural, Mechanical and Electrical designs.</li> </ul> <p><b>Professional Land Surveyor</b></p> <ul style="list-style-type: none"> <li>• Bachelor's Degree in Land Survey</li> <li>• Minimum of 5 years' experience in land survey related projects.</li> <li>• Professional registration with SAGC for at least three (3) years.</li> </ul> <p><b><u>ENVIRONMENTAL ENGINEERING</u></b></p> <p><b>Senior Environmental Scientist/Engineer</b></p> <ul style="list-style-type: none"> <li>• Minimum qualification - Master of Science/Master of Engineering in Environmental or related</li> <li>• Minimum of five years' experience on environmental work related to wastewater</li> <li>• Professional registration with SACNASP/ECSA</li> <li>• Registered as a practitioner with EAPASA</li> </ul> <p><b>Environmental Scientist/Engineer</b></p> <ul style="list-style-type: none"> <li>• Minimum qualification - BTech or Honours degree (science/engineering) in Environmental or related</li> <li>• Minimum of three years' experience on environmental work related to wastewater</li> <li>• Professional registration with SACNASP/ECSA</li> <li>• Registered as a practitioner with EAPASA</li> </ul>

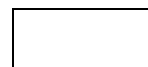
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

CATEGORY	MINIMUM REQUIREMENT
	<p><b>Environmental Practitioner</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/ National Diploma (science/engineering) in Environmental or related</li> <li>Minimum of three years' experience on environmental work related to wastewater</li> <li>Registered as a practitioner with EAPASA</li> </ul> <p><b>Hydrologist</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/ National Diploma in hydrology or related hydrological qualification</li> <li>Minimum of three years' experience on hydrological work</li> <li>Professional registration with SACNASP/ECSA</li> </ul> <p><b>Environmental Management System (EMS) Lead Auditor</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/ National Diploma in Science/Engineering</li> <li>Minimum 5 years' experience as a lead EMS auditor</li> <li>Registered with SAACTA as a Lead Environmental Auditor</li> </ul> <p><b>Archaeological and Cultural Heritage Practitioner</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/ National Diploma (science/engineering) in archaeology or related heritage/cultural qualification</li> <li>Minimum of three years' experience on hydrological work</li> <li>Professional registration with the relevant professional body</li> </ul> <p><b>Ecologist/Biodiversity Scientist</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/National Diploma (science/engineering) in ecological/biodiversity qualification</li> <li>Minimum of three years' experience on ecological/biodiversity work</li> <li>Professional registration with SACNASP/ECSA</li> </ul> <p><b>Aquatic Scientist</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/National Diploma (science/engineering) in aquatic/biodiversity assessment qualification</li> <li>Minimum of three years' experience on ecological/biodiversity work</li> <li>Professional registration with SACNASP/ECSA</li> </ul> <p><b>Geotechnical Specialist/Engineer</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/ National Diploma in Geotech/geohydrology or related qualification</li> <li>Minimum of three years' experience on geotechnical work</li> <li>Professional registration with SACNASP/ECSA or equivalent professional body</li> </ul>

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

CATEGORY	MINIMUM REQUIREMENT
	<p><b>Socio-Economic Scientist</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/ National Diploma in social and/or economic studies</li> <li>Minimum of three years' experience</li> <li>Professional registration with the relevant professional body</li> </ul> <p><b>Air Quality Specialist</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/National Diploma in air quality, environmental or related qualification</li> <li>Minimum of three years' experience on air quality work</li> <li>Professional registration with SACNASP/ECSA or equivalent professional body</li> </ul> <p><b>Noise Specialist/Engineer</b></p> <ul style="list-style-type: none"> <li>Minimum qualification - Bachelor's degree/National Diploma in acoustics/engineering or related qualification</li> <li>Minimum of three years' experience on noise assessment work</li> <li>Professional registration with ECSA or equivalent professional body</li> </ul>
<b>ROADS AND STORMWATER</b>	<p><b>Traffic Engineer</b></p> <ul style="list-style-type: none"> <li>Bachelor's degree in Civil engineering</li> <li>Minimum 5 years experience in traffic engineering designs and investigations.</li> <li>Professional registration with ECSA for at least three (3) years.</li> </ul>

### C 3.1.3 PURPOSE OF PROGRAMME AND OUTCOMES

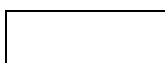
The Professional Services Framework Agreement is set up under the standard National Treasury definition and guidelines of Framework Agreements contained in all of the documents of the Standard for Infrastructure Procurement and Delivery Management (SIPDM).

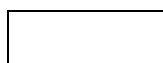
The Professional Services Framework Agreement is a Programme to assist ERWAT in the roll out of its wastewater infrastructure delivery plan which includes capacity upgrades, refurbishments, technology retrofits, condition assessments and all other infrastructure that is required to support the normal operation of Wastewater Care Works. The outcome of the Programme is to optimize wastewater infrastructure delivery for the purpose of improving ERWAT infrastructure stability and availability in order to adequately support investments and economic development across the City of Ekurhuleni (CoE).

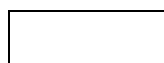
### C 3.1.4 EXTENT OF THE WORKS

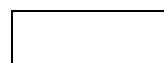
1. The work of the Professional Service Providers shall include the following:

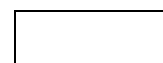
1.1. Undertaking duties of an engineering management nature on behalf of the Employer, such as Lead Consulting Engineer, Principal Agent, Principal Consultant, etc.

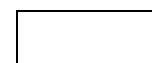
  
Contractor

  
Witness 1

  
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Employer

  
Witness 1

  
Witness 2

1.2. Carrying out Planning, Studies, Investigations and Assessments as describe under Clause 3.1 of the ECSA guideline scope of services, this will include activities such as listed below but not limited to:

- a) Environmental studies and authorisations (EA, WULA, EIA's, etc)
- b) Wastewater Process Evaluation, Process Optimization and Design.
- c) Specialist studies
- d) Infrastructure condition assessments
- e) Factory Assessment Tests
- f) Skills Training

1.3. Provision of the Normal Service for Wastewater infrastructure in line with Clauses 3.2 of the ECSA guideline scope of services, this will include activities such as listed below but not limited to:

- a) Establish the ERWAT requirements and preferences on the assigned projects.
- b) Preparing and finalising of the project concept in accordance with the brief approved by ERWAT.
- c) Developing of concept, preliminary and detailed designs.
- d) Preparing procurement and construction documents in consultation with ERWAT.
- e) Managing, administering, and monitoring construction contracts.
- f) Fulfilling and completing the project close out.
- g) Submission of the project close out report (soft and hard copy)

1.4. Provision of Additional Services for Wastewater infrastructure in line with Clauses 3.3 of the ECSA guideline scope of services, this will include activities such as listed below but not limited to:


- a) Taking over designs completed by other consultants
- b) Undertaking Dolomite Stability Reviews and/or Dolomite Risk Management Plans reviewed and approved by an independent Competence Level 4 Geo-professional as per SANS 1936-1:2012.
- c) Land survey works and establishment of cadastral
- d) Generating of as-built drawings and information.
- e) Dealing with Law and Contractual matters in line with “ *Clause 3.3.7 Mediation, Arbitration and Litigation proceedings and similar Services*” of the ECSA guideline scope of services
- f) Provide Construction Monitoring Services, Quality Assurance Systems, and Occupational Health and Safety Services.


2. The work will be mainly carried out through Three (3) different disciplines as follows:


- 2.1. Wastewater Infrastructure
- 2.2. Roads and Stormwater Management
- 2.3. Building Works


### C 3.1.5 LOCATION OF THE WORKS


The majority of the work shall normally take place around the nineteen (19) ERWAT water care works; in certain instances, the consulting engineer may be involved with projects where ERWAT is acting as an implementing agent in other municipalities, in such instances, all related additional costs shall be considered as additional services remunerated accordingly.


  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

## C 3.2 ENGINEERING PROJECTS

### C3.2.1 ERWAT PROJECTS, PROJECT SITUATIONS AND ANTICIPATED ENGINEERING EFFORT:

This program is aimed at addressing various engineering projects based on the ERWAT project plan, therefore the definition of the engineering scope should be provided at a level of detail that is as generic and relatively specific as to satisfactorily cover all the anticipated projects. Therefore, as a means to archive closely realistic submissions in terms of the professional fees and the key staff compliment for this program, the professional service provider should note the following scope parameters which will be applicable to the ERWAT projects during the course of this program i.e., ERWAT project types and indications of the engineering effort that should be anticipated by the Professional Service Providers.

#### 1. ERWAT Project Types/Engineering Work Types

The Ekurhuleni Water Care Company (ERWAT) will mainly focus on the following engineering work types:

- a) Civil, Structural, Hydraulics, Geotechnical and Process Engineering Services
  - a.1. Wastewater process units and complementary secondary structures i.e., Primary treatment structural process units, Secondary treatment structural process units, Tertiary treatment structural process units.
  - a.2. Wastewater Treatment Process design, evaluation and optimization.
  - a.3. Pipelines: Bulk outfall sewer pipes, bulk discharge effluent pipes, interconnecting process related pipes.
  - a.4. Plant Access Road infrastructure
  - a.5. lined earth dams/ponds and geotechnical services
  - a.6. Stormwater management
  - a.7. Building services: offices and industrial
- b) Mechanical Engineering Services
  - b.1. Mechanical plant and equipment for the Primary, Secondary and Tertiary Wastewater Treatment Processes
  - b.2. Pressure vessel design
  - b.3. Hazardous material systems
  - b.4. Pumping and pipeline systems
  - b.5. HVAC systems, Industrial process, piping and instrumentation
  - b.6. Building services : offices and laboratories
- c) Electrical Engineering Services
  - c.1. Motor control and electrical installations for machinery and equipment related to the Primary, Secondary and Tertiary Wastewater Treatment Processes.
  - c.2. MV and LV distribution
  - c.3. Areal lighting,
  - c.4. Energy management
  - c.5. Building services : offices and laboratories
- d) Control and Instrumentation Engineering Services
  - d.1. Industrial process, wiring, control and instrumentation related to the Primary, Secondary and Tertiary Wastewater Treatment Processes.
  - d.2. SCADA systems, Communications, Data and IT systems
  - d.3. Security and access control

#### 2. Project Situations and Engineering Effort/Input

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Contractor

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Witness 2

Employer

Witness 1

Witness 2



ERWAT has certain challenges which need to be considered by all bidders as an important factor in the anticipated projects that will be issued through this programme, the challenges may impact the price estimates and the engineering effort that may be required in the rendering of engineering services to ERWAT, depending on the respective project. The following challenges should be expected:

- a) ERWAT suffers from a legacy of lack of as-built information for its infrastructure,
- b) some of the ERWAT sites are associated with dolomite challenges,
- c) The operations are always live, therefore access to wastewater units is always a challenge and bidders will have to work around such challenges.
- d) The water care works are associated with hazardous gases such as Methane and Chlorine, therefore service providers are expected to be safety conscious and equip their personnel with the necessary Personal Protective Equipment (PPE).
- e) The work is industrial in nature, services providers should also mind the medical fitness of their personnel to work in industrial sites.

### C 3.2.2 PROJECT SCOPE:

The scope of this appointment includes undertaking duties of an engineering management nature, planning services, studies/feasibility studies, investigations, assessments, concept and inception, preliminary design development and reports (PDRs), detail designs development and reports, procurement and construction documentation, managing construction contracts, administering construction contracts, monitoring construction activities/projects, fulfilling and completing the project close-out report of various projects for various Wastewater Treatment infrastructure projects. The works will include wastewater pipelines, bulk sewer pipelines, wastewater process units, pump-stations, capacity upgrades and technological retrofits, telemetry, studies/investigations/audits, roads and stormwater management, building works, concrete related works, electrical and mechanical engineering works.

The work to be performed across the five engineering disciplines associated with this programme shall be categorised into the following activities:


- a) Activity 1 - Normal Services refer to ECSA clause 3.2
- b) Activity 2- Additional Services refer to ECSA clause 3.3
- c) Activity 3 – Time Based refer to clause to ECSA clause 4.2
- d) Activity 4 – Expenses and Costs refer to clause ECSA 4.6


### C3.2.3 PROJECT SPECIFICATIONS:


1. The project specifications for Activity 1 – Normal Services, Activity 3 –Time Based and Activity 4 will follow the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000) by Engineering Council of South Africa (ECSA). with Board Notice 138 of 2015 and Government Gazette No. 39480, dated 4 December 2015.
2. Project specifications for Activity 2 (Additional Services):
  - 2.1. Under Additional Services, the services below shall follow the Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000) by Engineering Council of South Africa(ECSA) with Board Notice 138 of 2015 and Government Gazette No. 39480, dated 4 December 2015.
    - a) Construction Monitoring
    - b) Occupational Health and Safety Act, 1993(act no.85 of 1993) and National Environmental Management Act, 1998 (act no.107 of 1998).
    - c) Lead Consultant Engineer


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- d) Principal Consultant
- e) Principal Agent
- f) Mediation, Arbitration and Litigation proceedings and similar Services

## 2.2. Taking Over of Designs Done by other Consulting Engineers

Under special conditions and as and when required, the Consulting Engineer will be expected to take over Design Reports, Drawings and Specifications prepared by other Consulting Engineers before an Instruction to Perform Works (IPW) can be issued. The Consulting Engineer will be offered the opportunity to review the said documents and agree on the terms and conditions for taking over such documentation through a Written Agreement between the Consulting Engineer and ERWAT.

## 2.3. Factory Assessment Testing (FAT)

For certain construction projects, mainly Mechanical, Electrical, Electronics related projects; the Consulting Engineer will be expected to carry out factory assessment testing of such equipment through independent testing programs to ascertain the employer of good compliance. The FAT shall normally include following inspection and testing:

- a) Electrical Engineering Works:
  - a.1. Conduct Inspection and testing for Transformers.
    - a.1.1. Visual Inspections
    - a.1.2. Voltage Tests
    - a.1.3. No Load and Full load tests
    - a.1.4. Winding resistance tests
    - a.1.5. Ratio tests
  - a.2. Conduct Inspection and Testing for Miniature substations and normal substations.
    - a.2.1. Visual inspections
    - a.2.2. Inspection of the breakers
    - a.2.3. Voltage Tests
    - a.2.4. No Load and Full load tests
    - a.2.5. Winding resistance tests
    - a.2.6. Ratio tests
    - a.2.7. Isolation tests
    - a.2.8. Primary and secondary injection tests
  - a.3. Conduct Inspection and Testing for Generators
    - a.3.1. Visual inspections (gland inspections, wiring inspections)
    - a.3.2. Sound tests
    - a.3.3. No load tests
    - a.3.4. Full load tests
    - a.3.5. Changeover system tests
  - a.4. Conduct Inspection and Testing for MCC (Motor Control Centre)
    - a.4.1. Visual inspection (Metal sheets, nuts and bolts, busbars, isolations, layouts)
    - a.4.2. Main Circuit Continuity Testing.
    - a.4.3. Load tests (per cubicle and per panel)
    - a.4.4. Check wiring of the panel
    - a.4.5. Insulation tests
    - a.4.6. Check cascading and kA rating
  - a.5. Conduct Inspection and Testing of Motors

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Employer

Witness 1

Witness 2

- a.5.1. Visual Inspections
- a.5.2. Check bearings
- a.5.3. Check connector blocks (Wiring, nuts)
- a.5.4. Insulation tests
- a.5.5. Check balancing of the phases
- a.5.6. Load test

b) Mechanical Engineering Works:

**b.1. Hydraulic Performance Tests:**

ISO 9906:2012 specifies Hydraulic Performance Tests for customers' acceptance of rotodynamic pumps (centrifugal, mixed flow and axial pumps). It is intended to be used for pump acceptance testing at pump test facilities, such as manufacturers' pump test facilities or laboratories. (**Consultant must ensure the testing facility is certified and tests are performed in line with the ERWAT operations condition. Furthermore, confirm that all duty points comply to the specification and suitable for chosen application.**)

**b.2. Proof Pressure Tests:**

Newly manufactured pressure equipment shall undergo a proof pressure test as determined by the relevant Health and Safety Standard. This test pressure shall be documented and form part of the Manufacturing Data Records. The pressure test shall be witnessed by Approved Inspection Authority (**AIA**), Manufacturer and the User representative (**Consultant**), in accordance with the requirements of the applicable SANS 347 conformity assessment module. Upon delivery of pressure equipment to site a thorough external visual inspection shall be performed to confirm that no transport damages occurred during loading / off loading, or during transport. After installation, and during the final inspection of the plant, this visual inspection report shall form part of the (**AIA**) pre-commissioning inspection certificate.

**b.3. Mechanical Vibration:**

ISO 10816-8:2014 establishes procedures and guidelines for the **Measurement And Classification Of Mechanical Vibration** of reciprocating compressor systems. The vibration values are defined primarily to classify the vibration of the compressor system and to avoid fatigue problems with parts in the reciprocating compressor system, i.e. foundation, compressor, dampers, piping, and auxiliary equipment mounted on the compressor system.

**b.4. Visual Inspections and Measurements**

The service provider shall be required to carry out inspections the use of precision instruments such as Verner Calipers, Micrometers, Dial Gauge, Pressure Gauge, etc.

**2.4. Quality Assurance System**

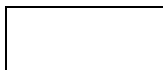
For certain works, ERWAT shall require Consulting Engineer to provide a third-party quality assurance service to ensure that installations are carried out according to manufactures specifications or certain agreed specifications. The tests and inspections listed under **item 2.3** above shall normally form part of the quality assurance system.

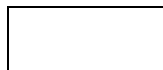
**2.5. Tests**

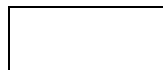
The ERWAT tests listed below shall be carried out in line with the following specifications:

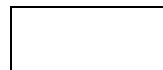
**2.5.1. Structural Condition Assessments for Hardened Concrete**

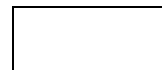
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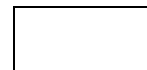
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

All testing shall be deemed to include the necessary field work, laboratory analysis, reporting documentation and all the repairs to damages caused by the test on the structural elements. The following test categories shall form part of the scope of condition assessments:

- a) Destructive Strength Testing (i.e., for 30MPA, 300 mm thick RC concrete walls)
  - a.1. Concrete core drilling and testing
  - a.2. Tensile Strength Test
- b) Non-Destructive Strength Testing (i.e., for 30MPA, 300 mm thick RC concrete walls)
  - b.1. Steel Pull Out Test
  - b.2. Rebound Hammer
  - b.3. Ultrasonic Pulse Velocity
  - b.4. Penetration Resistance Test
  - b.5. Crack widths and depths
  - b.6. Water Permeability
  - b.7. Reinforcement Scanning
  - b.8. Electrochemical Potential of Reinforcement
- c) Chemical Tests
  - c.1. Carbonation Test
  - c.2. Chloride Content Test
  - c.3. Sulphate Content Test
  - c.4. Alkali Content Test
  - c.5. Cement Content and Type

## **2.5.2. Wastewater Hydraulics Testing**

### **2.5.2.1. Sediment Transport and Deposition Test**

This test shall determine the sediment transport and deposition through the primary, secondary and tertiary process units of the Wastewater Care Works. The test shall also include settling velocity testing.

#### **2.5.2.2. 7 days Flow logging using GSM loggers**

- Duration: 7 consecutive days
- Logging data intervals: 15min
- Date and Time Stamp: Each logged value must have a date and time stamp.
- Flow Unit: Kiloliters per hour (kl /h)
- Logger Location: At water meter or any chamber subject to approval by ERWAT.
- Pulse Value: The service provider must confirm that the correct pulse value is applied for the meter and reed switch / pulsar used for the logging exercise. Service provider must have the relevant experience to obtain the correct pulse value.
- Data Submission: Data must be submitted in MSExcel format where the combined date and time stamp appears in column A and the pressure data appears in column B.
- Gaps in Data: Data should have no data gaps.
- Security: Service provider should undertake measures to secure/lock data logger.
- Meter Readings: Service provider must record the date, time and meter reading at the time of logger installation and removal and verify the volume logged matches the volume recorded on the flow meter.
- Photographs: Service provider must provide photographs of the logger installation and of the meter reading at the time of installation and removal of the data logger.

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Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

### 2.5.2.3. 7 days Pressure logging using GSM loggers

- Duration: 7 consecutive days
- Logging data intervals: 15min
- Date and Time Stamp: Each logged value must have a date and time stamp.
- Pressure Unit: Meters head (m)
- Logger Location: Fire hydrant, pressure tapping directly on mains pipe or any chamber subject to approval by ERWAT. No pressure logging allowed on taps.
- Data Submission: Data must be submitted in MS Excel format where the combined date and time stamp appears in column A and the pressure data appears in column B.
- Gaps in Data: Data should have no data gaps.
- Security: Service provider should undertake measures to secure/lock data logger.
- Pressure Gauge: Service provider must use a manual pressure gauge to verify the pressure being recorded on the data logger is correct, during the installation and removal of the logger.
- Photographs: Service provider must provide photographs of the logger installation and of the pressure gauge reading at the time of installation and removal of the data logger.

### 2.5.2.4. 7 days Sewer flow logging

#### *Suitable flow logging positions*

- Sewer flow logging must be performed only at suitable logging positions as indicated by the ERWAT. Suitable logging points must be identified by taking into consideration the following:
- Drainage area: Suitable logging points should be determined by hydraulic modelling in order to ensure that a known large drainage or sub-drainage area's flow is measured and can be compared to the results of the hydraulic model
- Flow logging points need to be on a straight line with no bends and/or side flows and no recent signs of overflow
- Flow must be measured in a manhole where the up and downstream pipes are of similar diameter, material and pipe slope
- Where up and downstream pipe slopes are not available these must be predetermined by surveying the relevant pipe invert levels at the up and downstream ends of the up and downstream pipes

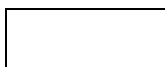
#### *Calibration of sewage flow loggers*

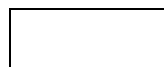
- Before logging can commence the sewage flow loggers must be calibrated utilising a fixed target value (level).

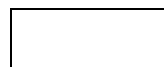
#### *Sewage flow logging*

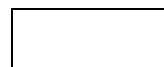
- Once a suitable flow logging position has been identified and the sewage flow loggers have been duly calibrated, the following must be measured at such a location:
- Flow depth must be measured in predetermined time-steps using an ultrasonic sensor over the predetermined logging period.
- A minimum flow logging period of 7 days is recommended.
- Flow velocity must be measured as well as theoretically calculated using Manning's formula and an estimated pipe roughness co-efficient
- Logging cannot be performed in a manhole if the flow through the manhole indicates signs of downstream blockage (i.e. measured flow velocity is less than theoretically calculated flow velocity)

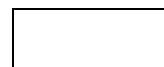
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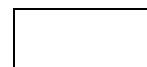
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

- If measured flow velocity is less than theoretically calculated flow velocity, flow logging results for the specific manhole must be discarded
- All sewage flow logging to be performed during dry-weather flow conditions, i.e. when ingress of stormwater is not present.

#### *Data Specification and Format*

- Logged sewage flow data must be summarized and provided in an Excel format report.

#### *Municipal Interaction*

- The appointed flow logger must get permission from the relevant depot personnel as and when flow logging within the depot are planned and/or conducted.
- The appointed flow logger should inform the relevant depot personnel as and when blockages are encountered to ensure that, the affected manholes are cleared and available for flow logging.
- Should circumstances arise where the flow logger is unable to locate manholes where the flow is to be logged, the appointed flow logger should contact the relevant depot personnel to assist with the confirmation and/or location of such manholes.

### **2.6. Specifications for Wastewater Sampling and Laboratory Analysis**

The ERWAT sampling Programme shall encompass all the necessary Sampling, Laboratory Analysis and Reporting, and shall also be aligned to the provisions of Clause 2.6.1 given below.

#### **2.6.1. Data collection procedures**

The additional wastewater data that requires a sampling and analysis program will supplement the historically measured data so that parameters suitable for model calibration and validation are obtained. The following procedure should be followed when collecting the wastewater samples:

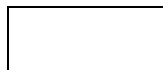
- The sampling program should ideally run in the winter during dry weather season.
- The program should run on a 7 day cycle (including Saturday and Sunday) to get data representing a typical week
- Samples should be collected on dry days. In the case of a rain event the sampling program should be paused for 3 days before resuming. I.e. if samples are collected on a Monday and a rain event occurs on Tuesday the program will continue on Saturday and Sunday. The following week samples will be collected for Tuesday to Thursday to get samples representing 7 days.
- Samples should not be collected if there are noticeable upsets in the collection system or at the treatment plant.
- Sampling results should be recorded and entered on the pre-prepared spreadsheets
- Figure 1 below shows the typical sampling points that sampling will generally be based, the actual sampling points shall be determined by the Water Care Works Operator based on routine operations

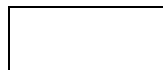
#### **2.6.2. Sampling and Laboratory Analysis.**

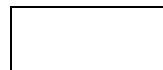
The ERWAT sampling Programme for each of the Wastewater Works process parameters listed hereunder, shall encompass all the necessary Sampling, Laboratory Analysis and Reporting, and shall also be aligned to the provisions of Clause 2.6.1 given above.

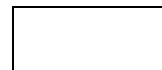
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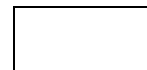
  
Contractor

  
Witness 1

  
Witness 2

  
Employer

  
Witness 1

  
Witness 2

- a) Inflow Reading (ML/D)
- b) Total COD (unfiltered) mg/l
- c) Total COD (filtered) mg/l
- d) Free and Saline Ammonia mg/l
- e) N - Total Kjeldahl Nitrogen mgN/L
- f) Ortho Phosphate mg/l
- g) P - Total P mgP/L
- h) Total Suspended Solids mg/l
- i) VSS Total mg ISS/L
- j) pH
- k) Total Alkalinity as CaCO<sub>3</sub>
- l) Conductivity
- m) MLSS
- n) MLVSS
- o) 0.45µ Filtered Free and Saline Ammonia
- p) 0.45µ Filtered Nitrate/Nitrite
- q) 0.45µ Filtered Ortho P
- r) Totalised daily WAS pumping rate
- s) DO concentrations for each cell (SCADA profile if available otherwise use a portable DO meter to record DO values as frequently as possible)
- t) Bioreactor temperature
- u) Internal mixed liquor "a" recycle pumping rate (totalised daily rate)
- v) Ferric dosing rate
- w) RAS pumping rate
- x) Chlorine dosing rate
- y) Nitrate/Nitrite
- z) Free chlorine

### 2.6.3. Output Documents

Sampling results should be documented in an excel workbook. The workbook should contain a PFD showing the sampling points and tables with the analyzed parameters. The format shall be site specific, therefore will be provided when an IPW is sent out to service providers.

### 2.7. Specification for survey work

- All survey work, regardless of whether it is performed to address queries with regards to existing survey information or whether it is completely new survey work, must be done in compliance to the specification as set out below:
- A qualified Professional Surveyor registered with the South African Geomatics Council (SAGC) must be utilised to complete all surveys.
- Data Specification and Format
  - The survey data should be provided in Lo 29, projected coordinate system format (WGS84).
  - The Y-Coordinate and X-Coordinate of each manhole should be captured
  - The Cover Level of each manhole should be captured
  - The Invert Levels of all incoming and outgoing pipes should be measured and captured
  - For all incoming pipes an additional two upstream manholes on the incoming pipe must be surveyed

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Contractor

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Employer

Witness 1

Witness 2



- The Diameters (inside) of all incoming and outgoing pipes should be measured and captured
  - The Pipe Material of all incoming and outgoing pipes should be captured
  - The sewage flow direction should be captured and comments are required with regards to the sewage flow that can be visually inspected e.g. pipe flowing half full with high flow velocity, pipe flowing full with very low velocity - downstream blockages suspected etc.
  - A photograph must be taken into all opened manholes clearly indicating all incoming and outgoing pipes. The photograph must be taken with the top of the photograph facing north. Alternatively a north arrow must be superimposed on the photograph.
  - All surveyed data mentioned above should be provided in tabular format (\*.xls)
  - All surveyed layout data should be provided in CAD format (\*.dwg or \*.dxf) showing the Manhole Numbers (chronologic).
  - Specification
    - i. Manhole Number - chronologic
    - ii. Coordinates - center of manhole lid (in m, nearest cm)
    - iii. Cover Levels - center of manhole lid (in m, nearest mm)
    - iv. Invert Levels - invert level of pipes (in m, nearest mm)
    - v. Pipe Diameters - inside diameter (in mm, nearest mm)
    - vi. Pipe Material - pipe material (e.g. Clay, uPVC, AC)
  - The CAD format drawing should clearly indicate the connectivity and flow direction of all surveyed sewer pipes and manholes
- Municipal Interaction
    - The appointed surveyor should inform the relevant depot personnel as and when surveys within the depot are planned and/or conducted.
    - Furthermore, the appointed surveyor should inform the relevant depot personnel as and when blockages are encountered to ensure that the affected manholes are cleared and available for survey.

Finally, should circumstances arise where the surveyor is unable to locate manholes to be surveyed, the appointed surveyor should contact the relevant depot personnel to assist the confirmation and/or location of such manholes.

## 2.8. Geotechnical Investigations and Dolomite Stability Reviews

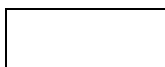
### 2.8.1. General Requirements

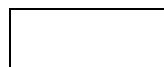
- SANS 1936:2012 Development of dolomite land (Parts 1, 2, 3 and 4)
- A suitably qualified Professional Geotechnical Engineer or Geologist should conduct all Geotechnical Investigations and Dolomite Stability Reviews to the approval of Council for Geoscience.
- All Dolomite Stability Reviews and/or Dolomite Risk Management Plans must be reviewed and approved by an independent Competence Level 4 Geo-professional as per SANS 1936-1:2012.

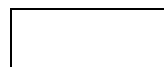
### 2.8.2. Specifications for Dolomite Investigations

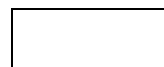
All dolomite investigations shall at minimum contain the following specifications:

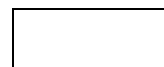
- Desktop studies and geology of site: the study to include, published and topographic maps, aerial photographs, ortho-photographs, geo-hydrological maps, previous field work, site inspection/walkover surveys.
- Determining soil profile, engineering properties and workability of materials (including identification of problem soils)
- Determine level of bedrock

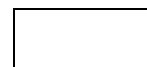
  
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- Determine presence of groundwater
- Dolomitic Stability Evaluation in line with SANS 1936
- Relevant investigative tests:
  - Percussion boreholes, up to 60m depth
  - Gravity Survey
  - Test pits
  - Laboratory Testing
  - DCP Testing
  - DPSH Testing

## 2.9. Specification for Environmental Work

### 2.9.1. Environmental Authorizations (EIA)


- A suitably qualified Environmental Assessment Practitioner registered with the Environmental Assessment Practitioners Association of South Africa (EAPASA) should conduct all Environmental Authorizations i.e., Basic Assessment and Scoping and Environmental Impact Assessment processes, that are required in terms of the Environmental Impact Assessment Regulations, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, in order to acquire environmental authorisation.


#### 2.9.1.1. Requirements


- The lead environmental assessment practitioner must provide evidence of professional registration with an accredited recognised professional body relevant to environmental services such as SACNASP, EAPASA, etc.
- The PSP must have extensive knowledge and experience in conducting EIA
- The PSP must be able to provide all the necessary tools required to perform the work as outlined in the contract
- The PSP shall be required to timeously report to ERWAT as and when required
- The PSP must immediately inform ERWAT about the delays and reasons thereof, should they not be able to complete work on the pre-arranged date and provide alternative arrangements
- The PSP shall not submit or share any information gathered during the service provision period or after, without ERWAT's approval, and therefore all information, in any format, remains the Property of ERWAT
- During the service provision period, no equipment may be removed from site without written permission from the relevant Plant Manager; and
- Where the ERWAT personnel shall be used during the service provision period, the process and procedures shall have to be communicated in time, as to avoid uncertainties on the day-to-day company activities
- From time-to-time ERWAT may request PSP to expose ERWAT staff to Environmental Impact Assessment processes and procedures


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## **2.9.1.2. Environmental Impact Assessment Process**

### **2.9.1.2.1. EIA Application Phase**

The following actions shall take place during this initial phase:

- An initial briefing meeting to discuss and agree upon the process
- Preparation of a detailed programme and schedule of all activities to be undertaken and all specialist studies deemed necessary to satisfy the relevant legislative requirements with timeframes and responsible persons for completion.
- Site visit.
- Pre-application meeting with the competent authority e.g., Gauteng Department of Agriculture and Rural Development (GDARD) and Department of Forestry, Fisheries and the Environment (DFFE) to discuss the process to be followed and any specific requirements.
- Preparation of environmental authorisation application form for the relevant listed activities and supporting documentation and submission to the competent authority.
- Compilation of a Public Participation Plan and submission to the competent authority approval.

### **2.9.1.2.2. Basic Assessment Process**

Specific steps that will be undertaken as part of this process include:

- Identify the key impacts and their consequences on the environment (bio-physical and socioeconomic components), taking into consideration any sensitivities or limitations that may exist in respect of the area.
- Conduct public participation process
- Identify alternatives for the project in consultation with the project team and input from Interested and Affected Parties (I&As).
- Conduct specialist studies
- Draft Basic Assessment Report and Environmental Management Programme Report (BAR & EMP).
- Internal and external review of the draft BAR prior to submission to the authorities and other stakeholders


### **2.9.1.2.3. Scoping and EIA Process**


Specific steps that will be undertaken as part of this process include:


- Review existing information for the sites.
- Initiate specialist studies.
- Identify the key impacts and their consequences on the environment (bio-physical and socio-economic components), taking into consideration any sensitivity or limitations that


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may exist in respect of the area.

- Conduct public participation process
- Identify alternatives for the projects in consultation with the project team and input from interested and affected parties (I&APs).
- Identify the nature and extent of further investigations required.
- Compile a plan of study for EIA and Terms of Reference for specialist investigations.
- Compile a draft scoping and EIA report
- Internal and external review of the draft scoping and EIA report prior to submission to the authorities and other stakeholders

### 2.9.2. Specialist Studies

The following specialist studies will need to be conducted as required by the competent authorities required for either the Basic Assessment processes and/or Scoping and EIA process:

- Archaeological and Cultural Heritage Assessment
- Ecological/Wetland/Biodiversity Assessment
- Aquatic Biodiversity Assessment
- Hydrological Assessment
- Geotechnical Assessment
- Socio-Economic Assessment
- Air Quality Assessment
- Noise Assessment

### 2.9.3. Water Use License and General Authorization (GA / WUL)

A suitably qualified Professional Natural Scientist registered with the South African Council for Natural Scientific Professions (SACNASP) should conduct all Water Use License Applications (WUL) and/or General Authorizations (GA) to the approval of the Department of Water and Sanitation (DWS).

#### 2.9.3.1. Water Use License Application/Amendment Process

The following steps must be taken as part of this process:

- A pre-application enquiry will be lodged on electronic Water Use Licence Application and Authorisation System (e-WULAAS), followed by a pre-application enquiry
- Meeting with the Department of Water and Sanitation (DWS).
- The pre-application enquiry meeting will serve to discuss the procedural requirements

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and required documents to be submitted to the Department.

- Compilation of the required application forms and submission on e-WULAAS.
- Site inspection with relevant DWS officials.
- Compilation and submission of a Water Use Licence Application (WULA) technical report
- Public participation in line with the environmental authorisation process.

#### **2.9.4. Environmental Management System**

A suitably qualified, registered, and experienced professional service provider(s), with the necessary skills and background to ensure the implementation of ISO 14001 Environmental Management System

#### **2.9.5. General Requirements for Environmental Work**

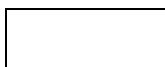
- The PSP must submit proof of relevant experience (minimum of 5 projects) in ISO 14001 Environmental Management System implementation and abundant understanding of the environmental legislations
- The project leader must provide evidence of professional registration with the relevant accredited and recognised professional body such as SACNASP/ECSA/SAATCA and submit their CV showing the relevant information
- The PSP will be required to delegate an official to work full-time on the project and ensure the smooth running of the project, and in a case where they need to be onsite reporting regularly on agreed time schedules.
- The PSP must be able to provide all the necessary tools required to perform the work as outlined in the contract
- The PSP will be required to work closely with the delegated ERWAT staff
- The PSP will have to ensure that the systems is well implemented and well-running before handing over to ERWAT, after a testing and training of the delegated staff
- The PSP will be required to familiarise themselves with the Olifantsfontein WCW required for ISO implementation and conduct the necessary assessments to ensure fulfilment of the system
- The PSP will develop reports and submit as soft and hard copies where necessary, and workshop the reports to ERWAT on agreed time schedules

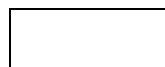
#### **2.9.6. Deliverables**

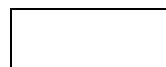
The following steps must be taken as part of this process:

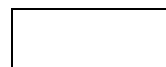
- Conduct the environmental assessment (initial) as per the requirements of ISO 14001 environmental management system, as per the latest ISO 14001 EMS version of the standard
- Review ERWAT's environmental policy, objectives, and targets, and developing the

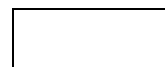
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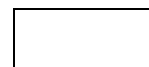
  
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required environmental programmes


- Identify environmental aspects and developing register of environmental aspects for each site
- Review legal and other requirements and developing register of legal and other requirements
- Identify and define the resources, roles, responsibilities, and authorities required for the implementation of the environmental management system
- Identify the necessary awareness and training needs as per the ISO requirements to ensure competence of staff and including contractors
- Establishing a method for internal and external communication regarding environmental matters
- Develop the necessary documentation as required for ISO 14001 EMS and establishing a system for control of these documents and control of records
- Develop all the necessary environmental procedures and SOPs, instruction forms and manuals, inclusive of all the necessary requirements for a functional system
- Conduct the environmental assessment (before project hand over) as per the requirements of the latest version of the ISO 14001 standard.


#### **C.3.2.5 COPYRIGHT/PATENT RIGHTS:**


1. All information obtained and paid for during the course of the project is required to be submitted to ERWAT in the pre-specified format.
2. All data, information, plans, documents and other deliverables collated and/or produced as a result of this appointment are the rightful property of ERWAT, and ERWAT shall also require the copyright thereof.
3. ERWAT reserves the right, in its sole discretion, to make any of the above-mentioned data, information, plans, documents and other deliverables, available for use, processing or sharing with / by other organizations.
4. ERWAT, in paying for any appointment of a consultant, also acquires the intellectual property associated with the project being / having been undertaken. This intellectual property shall not be utilized elsewhere without prior written consent of ERWAT.
5. The source codes of all electronically developed programmes and systems are considered to be a part of the project and need to be delivered to ERWAT on completion of the project who will then assume full ownership of such source codes.
6. In the event that source codes are changed / or altered or modified for whatever reason, such changes shall be communicated and delivered to ERWAT on a mutually agreed basis.
7. Any development of programmes, systems and other application need to be undertaken in such a manner so as to be compatible with ERWAT systems at the time of development.


Copyright in any document produced, and the patent rights or ownership in any plant, machinery, thing, system or process designed, by a consultant in the course of the consultancy service is vested in ERWAT. After the completion of the project all documents become the sole property of ERWAT, and ERWAT


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reserves the right to utilize the documentation as a standard for the erection of similar and/or identical buildings in other locations within the jurisdiction of ERWAT.

ERWAT shall reserve the right to terminate the appointment at any stage, and the Principal Consultant or Consulting Engineer will be entitled to be remunerated only for the work completed before receiving the notice of termination.

**C.3.2.6 General Requirements:**

- 1. Bidders must take note that any designs must take into account all legislative provisions, national/international standards as well as DTI local content provisions where applicable.**
- 2. The proposal on the report/design shall ensure compliance with OHS Provisions as well as National Building Regulations.**
- 3. Prepare and deliver the construction bid documents and ensure that they take into account the provisions of ERWAT's SCM policy and procedures.**

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**PROJECT NO: ERW2211/02**


**THE APPOINTMENT OF AS AND WHEN REQUIRED PROFESSIONAL SERVICE PROVIDERS, TO RENDER SERVICES AS ENGINEERING CONSULTANTS TO THE WASTEWATER INFRASTRUCTURE PROJECTS AT THE EKURHULENI WATER CARE COMPANY FOR A PERIOD OF THIRTY SIX (36) MONTHS**


**C4 SITE INFORMATION**


**C4.1 General Information**


**C4.2 Site Location**


  
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### C 4.1 General information

All equipment and materials shall be designed and manufactured to operate under the following conditions:

Altitude above sea level	-	1482m
<u>Summer Conditions</u>		
Average Temperature	-	20°C
Maximum Temperature	-	45 °C
Minimum Temperature	-	14.7°C
Relative Humidity	-	48% - 80%
Wind - Predominantly North Westerly average	-	4.1 m/s
<u>Winter Conditions</u>		
Average Temperature	-	10.4°C
Maximum Temperature	-	16.7°C
Minimum Temperature	-	-5°C
Relative Humidity	-	28% - 70%

All Wastewater Treatment Works will have large open liquid areas which are aerated and or agitated and the environment is damp. The high prevailing winds can also carry spray and foam from the plant.

This environment is very corrosive to ferrous metals and, where the use of such metals cannot be avoided, the metals must be adequately protected, such protection systems being designed for a life of at least 15 years.

Various gases are also present throughout the treatment works and these may contain hydrogen sulphide which, in addition to being corrosive to ferrous metals, is also corrosive to most non-ferrous metals. The effect on copper alloys can be particularly severe, often with disastrous effects on the reliability and life of switch gear, control systems, slip-rings, etc. Such equipment must there for be adequately sealed and protected.

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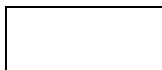
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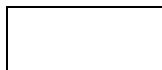
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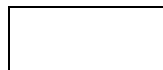


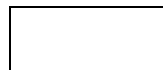
PLANT NAME WCW	PHYSICAL ADDRESS	TOWNSHIP	WARD NUMBERS	GPS COORDINATES	
				S	E
Ancor	Ermelo Road, Strubenvale, Springs	Springs	76	26°16'08.45"	28°29'00.15"
Benoni	6 Lancaster Road, Actonville, Benoni	Benoni	29	26°12'30.19"	28°19'00.48"
Carl Grundling	Vorsterkroon, Nigel	Nigel	88	26°23'17.69"	28°28'28.00"
Daveyton	Plot 4, Holfontein Road, Etwawa Ext 1, Benoni	Daveyton	28	26°08'08.72"	28°27'49.20"
Dekema	536 Sontonga Street, Motsamai Section, Katlehong	Katlehong	10	26°20'39.40" S, 28°10'01.31" E or 26°19'36.94" S, 28°09'48.25" E	
Esther Park	Parkland Drive, Esther Park, Kempton Park	Kempton Park	104	26°06'02.43"	28°10'57.80"
Head Office	CoE	Kempton Park	89		
Hartebeestfontein	R25 Bapsfontein/ Hartebeestfontein	Kempton Park	89	26°01'11.58"	28°17'04.80"
Heidelberg	Farm Bosch Hoek 385, Vaaldam Road, Heidelberg	Heidelberg	1	26°32'22.59"	28°19'48.93"
Herbert Bickley	Heidelberg Road, Plot 14, Maraisdrift, Nigel	Nigel	76	26°26'40.37"	28°26'46.89"
JP Marais	Corner of N12/Kingsway Road, Benoni	Benoni	29	26°10'13.46"	28°23'49.21"
Jan Smuts	Corner Escombe and Wanderers Street, Brakpan	Brakpan	97	26°13'24.45"	28°22'33.01"
Olifantsfontein	Keramiek Road, Olifantsfontein	Kempton Park	1	25°56'24.48"	28°12'57.96"
Ratanda	Farm Klipstapel, Vaaldam Road, Ratanda	Ratanda	2	26°34'57.80"	28°18'11.27"
Rondebult	Corner Kalk/Van Dyk Roads, Rondebult	Boksburg	41	26°17'57.92"	28°13'37.82"
Rynfield	69 Sarel Cilliers Street, Rynfield, Benon	Benoni	27	26°09'31.05"	28°21'21.41"
Tsakane	Corner Modjadji and Khama Street, Tsakane, Brakpan	Tsakane	112	26°22'31.93"	28°21'58.20"
Vlakplaats	Corner Brickfield/Bierman Streets, Vosloorus	Voslorus	44	26°20'47.85"	28°10'55.11"
Waterval	1 Eike Road, Klip River	Alberton	12	26°26'14.12"	28°06'03.55"
Welgedacht	1 Carnation Road, Welgedacht Agricultural Holdings, Springs	Springs	75	26°11'29.18"	28°28'26.86"

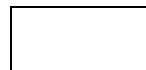
  
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Witness 2

  
Employer

  
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Witness 2