

CLUSTER

Trading Services

UNIT

Water and Sanitation

DEPARTMENT

Sanitation Operations: Mechanical and Electrical

PROCUREMENT DOCUMENT PROFESSIONAL SERVICES

Documents are to be obtained, free of charge, in electronic format, from the National Treasury's eTenders website or the eThekwini Municipality's website.

Contract No: PSC 2022/018

Provision of Multi-disciplinary Engineering Consulting

Contract Title: Services for the Southern Wastewater Treatment Works:

Electro-Mechanical Upgrades

CLARIFICATION MEETING AND QUERIES

Clarification Meeting: Compulsory Clarification Meeting

Southern Wastewater Treatment Works

Meeting Location, Date, Time: (@ co-ordinates -29.955135360820552, 30.97299685576011)]

On 13 April 2023 at 10 AM

Queries can be addressed to: Ritesh Kandhai Pr.Cert.Eng

The Employer's Agent's: Tel: 031 311 4875

Representative: eMail: ritesh.kandhai@durban.gov.za

TENDER SUBMISSION

Delivery Location: The Tender Box in the foyer of the Municipal Building

166 KE Masinga Road, Durban

Closing Date/ Time: Friday, 12 May 2023 at 11h00

FACSIMILE, eMAIL, or POSTED TENDERS WILL NOT BE ACCEPTED

Issued by:

ETHEKWINI MUNICIPALITY

Deputy Head: Sanitation Operations: Mechanical and Electrical

Date of Issue: 06/04/2023Document Version 24/02/2023(a)

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	-		
Tenderer Name:			VAT Registered: Yes No
	Price (excl)	VAT	Price (incl)
Submitted:	R	R	R
Corrected:	R	R	R

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PART T1: TENDERING PROCEDURES

T1.1.1: TENDER NOTICE AND INVITATION TO TENDER

Only Service Providers from the approved panel of consultants, for Water and Sanitation Unit (WS 7130), are hereby invited to tender for the provision of multi-disciplinary engineering consulting services for the Electro-Mechanical Upgrades of the Southern Wastewater Treatment Works.

Subject	Description	Tender Data Ref.
Employer	The Employer is the eThekwini Municipality as represented by: Deputy Head: Sanitation Operations: Mechanical and Electrical	F.1.1.1
Tender Documents	Documents can only be obtained in electronic format, issued by the eThekwini Municipality. Documentation can be downloaded from the National Treasury's eTenders website or the eThekwini Municipality's Website. The entire document should be printed (on A4 paper) and suitably bound by the tenderer.	F.1.2
Eligibility	CIDB -N/A	F.2.1.1
Clarification Meeting	Southern Wastewater Treatment Works (@ co-ordinates -29.955135360820552, 30.97299685576011)] On 13 April 2023 at 10 AM	F.2.7
Emailed Queries	Queries relating to this document to be emailed by 26 April 2023 and a consolidated question and answers will be uploaded by 04 May 2023. Employer's Agent's Representative whose contact details are: Ritesh Kandhai Pr.Cert.Eng Tel: 031 311 4875 eMail: ritesh.kandhai@durban.gov.za	F.2.8
Submitting a Tender Offer	Tender offers shall be delivered to: The Tender Box in the foyer of the Municipal Building 166 KE Masinga Road, Durban	F.2.13
Closing Time	Tender offers shall be delivered on or before Friday , 12 May 2023 at or before 11h00 .	F.2.15
Evaluation of Tender Offers	The 80/20 Price Preference Point System, as specified in the PPPFA Regulations 2022 will be applied in the evaluation of tenders. Refer to Clause F.3.11 of the Tender Data for the Specific Goal(S) for the awarding of Preference Points, and other related evaluation requirements.	F.3.11

Requirements for sealing, addressing, delivery, opening and assessment of tenders are further stated in the Tender Data

PART T1: TENDERING PROCEDURES

T1.2: TENDER DATA

T1.2.1 STANDARD CONDITIONS OF TENDER

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 2015 of 10 July 2015.

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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.

T1.2.2 TENDER DATA

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

F.1: GENERAL

- **F.1.1** The employer: The Employer for this Contract is the eThekwini Municipality as represented by: Deputy Head: Sanitation Operations: Mechanical and Electrical
- **F.1.2 Tender documents**: The Tender Documents issued by the Employer comprise:
 - 1) This procurement document.
 - 2) "General Conditions of Contract for Construction Works 3rd Edition 2015" issued by the South African Institution of Civil Engineering (GCC 2015). This document is obtainable separately, and Tenderers shall obtain their own copies.
 - 3) Drawings, issued separately from this document, or bound in Section C3.4 (as an Annexure).
 - 4) In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations, and standards referred to in this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies, and the participation of targeted enterprise and labour.
 - The Employer's current (as at advertising date) Supply Chain Management Policy.
 - The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations (2022).
 - The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).
 - The Construction Industry Development Board Act No 38 of 2000 and the Regulations issued in terms of the Act (July 2013).
 - SANS 1921:2004 Construction and Management Requirements for Works Contract, Parts 1-3.
 - Any other eThekwini Policy documents referenced in the Tender Documents.

Electronically downloaded documentation is obtainable from the National Treasury's **eTenders Website** or the **eThekwini Municipality's Website** at URLs:

https://www.etenders.gov.za/

https://www.durban.gov.za/pages/business/procurement

The entire downloaded document should be printed on white A4 paper (single-sided) and suitably bound by the tenderer.

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F.1.4 Communication and employer's agent: The Employer's Agent's Representative is:

Ritesh Kandhai Pr.Cert.Eng

Tel: 031 311 4875

eMail: ritesh.kandhai@durban.gov.za

The Tenderer's contact details, as indicated in the Contract Data: Clause C1.2.2.2 "Data to Be Provided by Contractor", shall be deemed as the only valid contact details for the Tenderer for use in communications between the Employer's Agent and the Tenderer.

F.2: TENDERER'S OBLIGATIONS

F.2.1 Eligibility: General

A Tenderer will not be eligible to submit a tender if:

- (a) the Tenderer does not comply with the legal requirements as stated in the Employer's current SCM Policy.
- (b) the Tenderer cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract.
- (c) In the event of a Compulsory Clarification Meeting:
 - i) the Tenderer fails to attend the Compulsory Clarification Meeting.
 - ii) the Tenderer fails to have form "Certificate of Attendance at Clarification Meeting / Site Inspection" (in T2.2) signed by the Employer's Agent or his representative.
- (d) in the case of JV submissions, two or more JV entities have common directors / shareholders or common entities tendering for the same works.
- (e) at the time of closing of tenders, the Tenderer is not registered on the National Treasury Central Supplier Database (CSD) as a service provider. In the case of a Joint Venture, this requirement will apply individually to each party in the Joint Venture.
- (f) The tenderer has not submitted, with this tender, a valid Letter of Good Standing from the Compensation Commissioner as proof of being registered and in good standing with the compensation fund. Reference is to be made to Returnable Document T2.2.13.
- (g) The tender fails to complete and sign the Declaration of Municipal Fees in T2.2: "Returnable Documents" and submits the required documentation. Reference is to be made to Returnable Document T2.2.12.
- (h) The tenderer is not listed under the approved panel of Consultants for Water and Sanitation Unit under contract no. WS 7130 (see attached list of the approved panel under section C4: Annexures).
- (i) The tenderer enters into a Joint Venture with a firm that is not on the approved panel referred to in item (h) above.

SCM Policy (Cl.14(4)) requires suppliers/ service providers/ contractors to be registered on the eThekwini Municipality Central Supplier Database or be in a position to be so before the award.

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In the event of the Tenderer not being registered on the eThekwini Municipality's Central Supplier Database, the tenderer must register on the internet at www.durban.gov.za by following these links:

- Business
- Supply Chain Management (SCM)
- Accredited Supplier and Contractor's Database.

The following are to be noted:

- (a) The information for registration as in the possession of the eThekwini Municipality will apply.
- (b) It is the Tenderer's responsibility to ensure that the details as submitted to the Municipality are correct.
- (c) Tenderers are to register prior to the submission of tenders.

F.2.2.2 The cost of the tender documents: Replace this paragraph with the following:

"Documents are to be obtained, <u>free of charge</u>, in electronic format, from the **National Treasury's eTenders website** or the **eThekwini Municipality's Website**. The entire electronically downloaded document should be printed on white A4 paper (single-sided) and suitably bound by the tenderer.

F.2.6 **Acknowledge addenda:** Add the following paragraphs to the clause:

"Addenda will be published, in electronic format, on the National Treasury's eTenders website (see F.2.2.2 above). Tenderers are to ensure that the eTenders website is consulted for any published addenda pertaining to this tender up to three days before the tender closing time as stated in the Tender Data."

"Acknowledgement of receipt of the addenda will be by the return of the relevant completed, dated, and signed portion of the addenda, to the physical or email address as specified on the addenda. Failure of the tenderer to comply with the requirements of the addenda may result in the tender submission being made non-responsive."

F.2.7 Clarification meeting:

Southern Wastewater Treatment Works (@ co-ordinates -29.955135360820552, 30.97299685576011)] On 13 April 2023 at 10 AM

In the event of a Compulsory Clarification Meeting, Tenderers must sign the attendance register in the name of the tendering entity. The Tenderer's representative(s) at the clarification meeting must be able to clearly convey the discussions at the meeting to the person(s) responsible for compiling the entity's tender offer.

- F.2.12 Alternative tender offers: No alternative tender offers will be considered.
- **F.2.13** Submitting a tender offer: Submissions must be submitted on official submission documentation issued (in electronic format) by the eThekwini Municipality.

Identification details to be shown on each tender offer package are:

Contract No. : PSC 2022/018

• Contract Title : Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater Treatment Works: Electro-Mechanical Upgrades

The Employer's address for delivery of tender offers is:

The Tender Box in the foyer of the Municipal Building 166 KE Masinga Road, Durban

Tenderers are to include, with their "hard copy" submission, a memory-stick containing an electronically scanned (300 dpi resolution) Public Document Format (PDF) copy of their complete bid submission. This PDF file should be named using the contract number and the Tenderer's name, eg. "XX-xxxx – Tenderers Name.PDF". The memory-stick must be securely fixed to the paper submission.

Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

F.2.15 Closing time: The closing time for delivery of tender offers is:

Date: Friday, 12 May 2023

• Time: 11h00

- **F.2.16** Tender offer validity: The Tender Offer validity period is 120 Days from the closing date for submission of tenders.
- **F.2.23** Certificates: Refer to T2.1 for a listing of certificates that must be provided with the tender. All certificates must be valid at the time of tender closing.

Tenderers are to include, at the back of their tender submission document, a printout of the required documents/ certificates.

The Form of Offer (C1.1.1), Data to be provided by the Contractor (C1.2.2.2), and the Bill of Quantities (C2.2) are also required to be completed in full.

Tax Clearance

Refer also to returnable form in T2.2: "Tax Compliance Status PIN/ Tax Clearance Certificate".

SARS has introduced a new Tax Compliance Status System. Tenderers must submit a **Tax Compliance Status PIN** (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status. This TCS PIN is to be entered on Returnable Document T2.2.1: "Compulsory Enterprise Questionnaire". Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

Failure to comply will make the tender non-responsive.

Central Supplier Database (CSD)

Refer also to returnable form in T2.2: "Eligibility: CSD Registration Report".

The entities (full) **CSD Registration Report**, obtained from the National Treasury Central Supplier Database, is to be included in the tender submission (https://secure.csd.gov.za).

Separate CSD Registration Reports are required for each entity in a Joint Venture.

Compensation Commissioner

Refer also to returnable form in T2.2: "Eligibility: Registration with Compensation Commissioner".

The tenderer is to supply proof of being registered and in good standing with the compensation fund by submitting a valid **Letter of Good Standing** from the Compensation Commissioner.

Failure to comply will make the tender non-responsive.

F.3: THE EMPLOYER'S UNDERTAKINGS

- **F.3.1.1** Respond to requests from the tenderer: Replace the words "five working days" with "three working days".
- **F.3.2 Issue addenda:** Add the following paragraph: "Addenda will be published, in electronic format, on the same platform(s) as the Tender Notification (refer to F.1.2).
- **F.3.4 Opening of Tender Submissions:** Tenders will be opened immediately after the closing time for tenders. The public reading of tenders will take place in the SCM Boardroom, 6th Floor, Engineering Unit Building, 166 KE Masinga Road, Durban.

F.3.11 Evaluation of Tender Offers:

Eligibility

Tenders will be checked for compliance with the ELIGIBILITY requirements, as specified in T1.2.2 Clause F.2.1. Tenderers not in compliance will be deemed non-responsive.

Functionality

FUNCTIONALITY will be evaluated to determine the responsiveness of tenders received. The minimum score for FUNCTIONALITY is 70 points. Those tenders not achieving the minimum score will be deemed non-responsive.

Preference Point System

The procedure for the evaluation of responsive tenders is **PRICE AND PREFERENCE** in accordance with the Employer's current SCM Policy, the Preferential Procurement Policy Framework Act (5 of 2000), and the Preferential Procurement Policy Framework Act Regulations (2022).

Price Points

The **80/20** preference points system will be applied. The Formula used to calculate the **Price Points** (max. 80) will be according to that specified Regulation 4.1.

Preference Points

Refer also to T2.2: "MBD 6.1: Preference Points Claim".

The Preference Points (either 20 or 10) will be derived from points allocated/ claimed for **Specific Goals** as indicated in the table(s) below, according to the specified **Goal Weightings**.

Ownership Goal

The tendering entity's **Percentage Ownership**, in terms of the **Ownership Category(s)** listed below, is to be used in the determination of the tenderer's claim for **Preference Points**.

Contract No: PSC 2022/018

Goal Weighting 100%				
Ownership Categories	Criteria	80/20	90/10	
Race: Black (w1)	0%	0	N/A	
	>0% and <51%	5	N/A	
	≥51% and <100%	12	N/A	
	100%	15	N/A	
Gender: Female (w2)	0%	0	N/A	
	>0% and <51%	2	N/A	
	≥51% and <100%	4	N/A	
	100%	5	N/A	

Proof of claim as declared on MBD 6.1 (1 or more of the following will be used in verifying the tenderer's status)

- Companies and Intellectual Property Commission registration document (CIPC)
- CSD report.
- B-BBEE Certificate of the tendering entity.
- Consolidated BBBEE Certificate if the tendering entity is a Consortium, Joint Venture, or Trust (Issued by verification agency accredited by the South African Accreditation System).
- Agreement for a Consortium, Joint Venture, or Trust.

The Category Weightings of the Ownership Categories will be:

- w1 = 75%, w2=25%, (where x + y = 100%)
- **F.3.13** Acceptance of tender offer: In addition to the requirements of Clause F.3.13 of the Standard Conditions of Tender, tender offers will only be accepted if:
 - (a) The tenderer submits a **valid Tax Clearance Certificate OR Tax Compliance Status PIN**, issued by the TCS System of the South African Revenue Services, or has made arrangements to meet outstanding tax obligations.
 - (b) The tenderer is **registered**, and "Active", with the Construction Industry Development Board, at time of tender closing, in an appropriate contractor grading designation.
 - (c) The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector.
 - (d) The tenderer has not:
 - Abused the Employer's Supply Chain Management System; or
 - Failed to perform on any previous contract and has been given a written notice to this effect.
 - (e) The tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.
 - (f) The tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer.
 - (g) The employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.

The Municipality does not bind itself to accept the lowest or any tender. It reserves the right to accept the whole or any part of a tender to place orders. Bidders shall not bind the Municipality to any minimum quantity per order. The successful Tenderer (s) shall be bound to provide any quantities stipulated in the specification.

Notwithstanding clause F.1.1.3 of the Standard Conditions of Tender the municipality reserves the right to award or not award the tender based on the municipalities available budget. The municipality has a firm intention to proceed with the work, subject to funding being identified.

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- **F.3.15** Complete adjudicator's contract: Refer to the General Conditions of Contract and the Contract Data.
- **F.3.17** Copies of contract: The number of paper copies of the signed contract to be provided by the Employer is ONE (1).

Tenderers are to include, with their "hard copy" submission, a memory-stick containing an electronically scanned (300 dpi resolution) Public Document Format (PDF) copy of their complete bid submission. This PDF file should be named using the contract number and the Tenderer's name, eg. "XX-xxxx – Tenderers Name.PDF". The memory-stick must be securely fixed to the paper submission.

T1.2.3 ADDITIONAL CONDITIONS OF TENDER

T1.2.3.1 Appeals

In terms of Regulation 49 of the Municipal Supply Chain Management Regulations persons aggrieved by decisions or actions taken by the Municipality, may lodge an appeal within 14 days of the decision or action, in writing to the Municipality. All appeals (clearly setting out the reasons for the appeal) and queries with regard to the decision of award are to be directed to:

The City Manager
Attention Ms S. Pillay
P O Box 1394
DURBAN, 4000
eMail: Simone.Pillay@durban.gov.za
P DURBAN, 4000

T1.2.3.2 Prohibition on awards to persons in the service of the state

Clause 44 of the Supply Chain Management Regulations states that the Municipality or Municipal Entity may not make any award to a person:

- (a) Who is in the service of the State:
- (b) If that person is not a natural person, of which a director, manager, principal shareholder or stakeholder is a person in the service of the state; or
- (c) Who is an advisor or consultant contracted with the municipality or a municipal entity.

Should a contract be awarded, and it is subsequently established that Clause 44 has been breached, the Employer shall have the right to terminate the contract with immediate effect.

T1.2.3.3 Code of Conduct and Local Labour

The Tenderers shall make themselves familiar with the requirements of the following policies that are available on web address: ftp://ftp.durban.gov.za/cesu/StdContractDocs/:

- Code of Conduct;
- The Use of CLOs and Local Labour

T1.2.3.5 Functionality Specification

F.3.11.9 The value of W_2 is 100. The Functionality criteria (and sub criteria if applicable) and maximum score in respect of each of the criteria are as follows:

Functionality Criteria		Maximum Score (Ms)	Weighting (W2)
1. Tenderer's Experience		100	20
2. Experience of Key Staff	Project Lead	100	15
	Lead Civil Design Engineer	100	10
	Lead Mechanical Design Engineer	100	15
	Lead Electrical Design Engineer	100	15
	Lead Control and Instrumentation Design Engineer	100	10
Approach Paper and Methodology		100	10
4. Programme		100	5

Maximum possible score for Functionality (Ms)

100

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The minimum number of evaluation points for Functionality is <u>70</u>. Only those tenderers who achieve the minimum number of Functionality evaluation points (or greater) will be eligible to have their tenders further evaluated.

Functionality shall be scored by not less than three evaluators and the scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for Functionality. Each evaluation criteria will be assessed in terms of six indicators and scores allocated according to the following table:

Level 0	Level 1	Level 2	Level 3	Level 4
0	40	70	90	100

Evaluation criteria will be adjudicated according to submissions made in accordance with the following schedules, which are found in T2.2: Returnable Schedules:

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Functionality Criteria	Returnable Schedules	
Tenderer's Experience	Experience of Tenderer	
Project Organogram and Experience of Key Staff	 Proposed Organisation and Staffing Key Personnel CV's with Experience of Key Personnel 	
Preliminary Programme	Preliminary Programme	
Construction Methodology & Quality Control	 Construction Approach, Methodology, and Quality Control Schedule of Proposed Subcontractors Plant and Equipment 	

Unless otherwise stated, evaluation criteria will be adjudicated with respect to the contract specific Scope of Work, as specified in C.3. In this regard the following definitions apply to the evaluation criteria prompts for judgement:

- "Successfully completed" implies a project has been completed on time and to specification.
- "Similar nature" implies projects that were of a value of at least 70% of this tender's value and had a comparable Scope of Work in terms of technical requirements and operations.
- "experience" implies experience on projects of a similar nature.
- "Accredited degree / diploma / National Technical Diploma implies a minimum 3-year qualification within the built environment, from a registered University or Institute of Technology or TVET

	Criteria: Tenderer's Experience				
The tenderer	Note: "successfully completed" implies a project that has been completed on time and to specification. The tenderer must submit certificates of completion / signed letters from the respective Client/s confirming completion of the said project. Failure to submit this information will result in the project not being considered as part of the evaluation.				
Level 0 Score = 0	No information provided / no relevant experience / projects completed more than fifteen (15) years ago / successfully completed less than two (2) projects / failure to submit certificates of completion.				
Level 1 Score = 40	To have successfully completed at least two (2) projects (within the past fifteen (15) years) which each involved the detailed design (i.e. civil, building, structural, mechanical, electrical and instrumentation design) and construction monitoring of Wastewater Treatment Works.				
<u>Level 2</u> Score = 70	To have successfully completed at least three (3) projects (within the past fifteen (15) years) which each involved the detailed design (i.e. civil, building, structural, mechanical, electrical and instrumentation design) and construction monitoring of Wastewater Treatment Works.				
Level 3 Score = 90	To have successfully completed at least four (4) projects (within the past fifteen (15) years) which each involved the detailed design (i.e. civil, building, structural, mechanical, electrical and instrumentation design) and construction monitoring of Wastewater Treatment Works.				
<u>Level 4</u> Score = 100	To have successfully completed at least five (5) projects (within the past fifteen (15) years) which each involved the detailed design (i.e. civil, building, structural, mechanical, electrical and instrumentation design) and construction monitoring of Wastewater Treatment Works.				

Criteria: Experience of Key Staff Note: certificates confirming qualifications and registrations must be attached. Failure to submit this information	Lead Control and Instrumentation Design Engineer Lead Electrical Design Engineer	No information provided / irrelevant information provided / does not meet minimum educational requirement / does not meet professional registration requirement / less than five (5) years of relevant experience. No information provided / irrelevant information provided / does not meet minimum educational requirement / does not meet professional registration requirement / less than five (5) years of relevant experience.	Five (5) to Nine (9) years of experience on projects relating to the design of industrial automation and control systems AND BSc Degree/BEng Degree/BTech Degree/NHD in Electrical/Electronic Engineering AND Registration with ECSA as PR Eng/PR Tech Eng Five (5) to Nine (9) years of experience on projects relating to the design of medium and low voltage electrical networks and motor control systems AND AND BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Electrical Engineering AND Registration with ECSA as PR Eng/PR Tech Eng/
will result in the respective key personnel			Pr.cert.Eng
not being considered as part of the evaluation. Level 1 Score = 40	Lead Mechanical Design Engineer	No information provided / irrelevant information provided / does not meet minimum educational requirement / does not meet professional registration requirement / less than five (5) years of relevant experience.	Five (5) to Nine (9) years of experience on projects relating to the design of mechanical components for municipal or industrial wastewater treatment plants and/or pump stations AND BSc Degree/BEng Degree/BTech Degree/NHD in Mechanical Engineering AND Registration with ECSA as PR Eng/PR Tech Eng/Pr.cert.Eng
	Lead Civil Design Engineer	No information provided / irrelevant information provided / does not meet minimum educational requirement / does not meet professional registration requirement / less than five (5) years of relevant experience.	Five (5) to Nine (9) years of experience on projects relating to civil and hydraulic design of wastewater treatment plants AND BSc Degree/BEng Degree/BTech Degree/NHD in Civil Engineering AND Registration with ECSA as PR Eng/PR Tech Eng
	Project Lead	No information provided / irrelevant information provided / does not meet minimum educational requirement / does not meet professional registration requirement / less than five (5) years of relevant experience.	Five (5) to Nine (9) years of experience on projects relating to the design and construction monitoring of municipal or industrial wastewater treatment plants AND BSc Degree/BEng Degree/BTech Degree/NHD in Engineering (Civil/Mechanical/ Electrical) AND Registration with ECSA as PR Eng/PR Tech Eng

Criteria : Experience of Key Staff continued	Lead Control and Instrumentation Design Engineer	Ten (10) to Fifteen (15) years of experience on projects relating to the design of industrial automation and control systems AND BSc Degree/BEng Degree/BTech Degree/ NHD in Electrical/Electronic Engineering AND Registration with ECSA as PR Eng/PR Tech Eng
	Lead Electrical Design Engineer	Ten (10) to Fifteen (15) years of experience on projects relating to the design of medium and low voltage electrical networks and motor control systems AND BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Electrical Engineering AND Registration with ECSA as PR Eng/PR Tech Eng/ Pr.cert.Eng
<u>Level 2</u> Score = 70	Lead Mechanical Design Engineer	Ten (10) to Fifteen (15) years of experience on projects relating to the design of mechanical components for municipal or industrial wastewater treatment plants and/or pump stations AND BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Mechanical Engineering AND Registration with ECSA as PR Eng/PR Tech Eng/Pr.Cert.Eng
	Lead Civil Design Engineer	Ten (10) to Fifteen (15) years of experience on projects relating to civil and hydraulic design of wastewater treatment plants AND BSc Degree/BEng Degree/BTech Degree/NHD in Civil Engineering AND Registration with ECSA as PR Eng/PR Tech Eng
	Project Lead	Ten (10) to Fifteen (15) years of experience on projects relating to the design and construction monitoring of municipal or industrial wastewater treatment plants AND BSc Degree/BEng Degree /BTech Degree/BEng Degree/NHD in Engineering (Civil/Mechanical/ Electrical) AND Registration with ECSA as PR Eng/PR Tech Eng

Criteria : Experience of Key Staff continued	Lead Control and Instrumentation Design Engineer	Sixteen (16) to Twenty (20) years of experience on projects relating to the design of industrial automation and control systems AND BSc Degree/BEng Degree/BTech Degree/NHD in Electrical/Electronic Engineering AND Registration with ECSA as PR Eng/PR Tech Eng
	Lead Electrical Design Engineer	Sixteen (16) to Twenty (20) years of experience on projects relating to the design of medium and low voltage electrical networks and motor control systems AND BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Electrical Engineering AND Registration with ECSA as PR Eng/PR Tech Eng/ Pr.cert.Eng
<u>Level 3</u> Score = 90	Lead Mechanical Design Engineer	Sixteen (16) to Twenty (20) years of experience on projects relating to the design of mechanical components for municipal or industrial wastewater treatment plants and/or pump stations AND BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Mechanical Engineering AND Registration with ECSA as PR Eng/PR Tech/ Eng/Pr.Cert.Eng
	Lead Process Design Engineer	Sixteen (16) to Twenty (20) years of experience on projects relating to process design of municipal or industrial wastewater treatment plants <u>AND</u> BSc Degree/BEng Degree/BTech Degree/NHD in Chemical Engineering AND Registration with ECSA as PR Eng/PR Tech Eng
	Lead Civil Design Engineer	Sixteen (16) to Twenty (20) years of experience on projects relating to civil and hydraulic design of wastewater treatment plants AND BSc Degree/BEng Degree/BTech Degree/NHD in Civil Engineering AND Registration with ECSA as PR Eng/PR Tech Eng
	Project Lead	Sixteen (16) to Twenty (20) years of experience on projects relating to the design and construction monitoring of municipal or industrial wastewater treatment plants AND BSc Degree/BEng Degree/BTech Degree/NHD in Engineering (Civil/Mechanical/ Electrical) AND Registration with ECSA as PR Eng/PR Tech Eng

Criteria :	Lead Control	Greater than Twenty (20) years of experience on projects relating to the design of
Experience	and	industrial automation and control systems
of Key Staff	Instrumentation	<u>AND</u>
continued	Design	BSc Degree/BEng Degree/BTech Degree/ NHD in Electrical/Electronic Engineering
	Engineer	AND
	3	Registration with ECSA as PR Eng/PR Tech Eng
		OR
		Consideration will be given to a non-registered professional provided that the
		proposed incumbent has at least 20 years relevant experience.
	Lead Electrical	Greater than Twenty (20) years of experience on projects relating to the design of
	Design	medium and low voltage electrical networks and motor control systems
	Engineer	AND
	g	BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Electrical Engineering
		AND
		Registration with ECSA as PR Eng/PR Tech Eng/ Pr.cert.Eng
Level 4	Lead	Greater than Twenty (20) years of experience on projects relating to the design of
Score = 100		
	Mechanical	mechanical components for municipal or industrial wastewater treatment plants
	Design	and/or pump stations
	Engineer	<u>AND</u>
		BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Mechanical Engineering
		<u>AND</u>
		Registration with ECSA as PR Eng/PR Tech Eng/Pr.Cert.Eng
	Lead Civil	Greater than Twenty (20) years of experience on projects relating to civil and
	Design	hydraulic design of wastewater treatment plants
	Engineer	AND
	3	BSc Degree/BEng Degree/BTech Degree/NHD in Civil Engineering
		AND
		Registration with ECSA as PR Eng/PR Tech Eng
		Registration with EOOA as FR English Feeling
	Project Lead	Greater than Twenty (20) years of experience on projects relating to the design and
	Project Lead	
		construction monitoring of municipal or industrial wastewater treatment plants
		AND
		BSc Degree/BEng Degree/BTech Degree/NHD in Engineering (Civil/Mechanical/
		Electrical)
		<u>AND</u>
		Registration with ECSA as PR Eng/PR Tech Eng

Criteria : Approach Paper and Methodology		
Level 0 Score = 0	No information provided / irrelevant information provided / a generic approach paper and methodology which does not adequately cover all programmed activities in chronological order.	
Level 1 Score = 40	A <u>generic</u> approach paper and methodology which <u>does not adequately</u> cover all programmed activities in chronological order.	
<u>Level 2</u> Score = 70	A <u>project specific</u> approach paper and methodology which <u>adequately</u> covers all programmed activities and listed in chronological order.	
<u>Level 3</u> Score = 90	A <u>project specific</u> approach paper and methodology which covers all programmed activities and associated regulatory compliance requirements in <u>detail</u> and listed in chronological order.	
<u>Level 4</u> Score = 100	A project specific approach paper and methodology which covers all programmed activities and associated regulatory compliance requirements in detail and listed in chronological order - Plus: Risk management. Staff and resource management. Relevant approvals. Quality control.	
	 Communication and stakeholder engagement. List of service providers to be used for quality control procedures (where applicable). 	

Criteria : Programme			
Level 0 Score = 0	No information provided / irrelevant information provided.		
Level 1 Score = 40	The programme is <u>generic</u> and <u>does not adequately</u> cover all key activities, in sequential order, with reasonable time frames relating to the scope of work and reflects the critical path.		
<u>Level 2</u> Score = 70	The programme <u>adequately</u> covers all key activities, in sequential order, with reasonable time frames relating to the scope of work and reflects the critical path.		
<u>Level 3</u> Score = 90	The programme <u>well defines</u> all key activities and resources, in sequential order, with reasonable time frames relating to the scope of work and reflects the critical path.		
Level 4 Score = 100	The programme well defines all key activities and resources, in sequential order, with reasonable time frames relating to the scope of work and reflects the critical path - Plus: Risk management. Staff and resource management. Relevant approvals. Quality control. S-curve cash flow. Communication and stakeholder engagement. List of service providers to be used for quality control procedures (where applicable).		

T1.2.3.6 PREVIOUSLY APPOINTED PROFESSIONAL CONSULTANT

Tenderers are informed that a Professional Services Provider was previously appointed to undertake investigations and concept designs for this project on behalf of the Employer.

However, this service provider cannot be precluded from participating in this tender enquiry and no appeals or objections will be entertained in this regard or to the service provider being recommended for award, should this firm's offer be the lowest and/or the most responsive.

T1.2.3.7 QUALIFICATION OF TENDER OFFERS

Tender submissions shall be free of qualifications and exclusions in order to remain responsive and any concerns or queries giving rise to potential qualifications shall be resolved with the Employer no later than 7 days of the tender closing date.

Failure to adhere to this condition will result in tenders being rendered non-responsive.

PART T2: RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

T2.1.1 General

The Tender Submission Documentation must be submitted in its entirety. All forms must be properly completed as required.

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The Tenderer is required to complete each and every Schedule and Form listed below to the best of their ability as the evaluation of tenders and the eventual contract will be based on the information provided by the Tenderer. Failure of a Tenderer to complete the Schedules and Forms to the satisfaction of the Employer will inevitably prejudice the tender and may lead to rejection on the grounds that the tender is non-responsive.

T2.1.2 Returnable Schedules, Forms and Certificates

Entity Spec	<u>:ific</u>	
T2.2.1	Compulsory Enterprise Questionnaire	22
T2.2.2	Certificate of Attendance at Clarification Meeting	24
T2.2.3	Tax Compliance Status PIN / Tax Clearance Certificate	25
T2.2.4	Contractor's Health and Safety Declaration	26
T2.2.5	MBD 4: Declaration of Interest	28
T2.2.6	MBD 5: Declaration for Procurement Above R10 Million	30
T2.2.7	MBD 6.1: Preference Points Claim Form ITO the Preferential Regulations	31
T2.2.8	MBD 8: Declaration of Bidder's Past SCM Practices	34
T2.2.9	MBD 9: Certificate of Independent Bid Determination	36
T2.2.10	Joint Venture Agreements (if applicable)	39
T2.2.11	Record of Addenda to Tender Documents (if applicable)	40
<u>Eligibility</u>		
T2.2.12	Eligibility: Declaration of Municipal Fees	41
T2.2.13	Eligibility: Registration with Compensation Commissioner	42
T2.2.14	Eligibility: CSD Registration Report	43
T2.2.15	Eligibility: Verification of CIDB Registration and Status	44
T2.2.16	Eligibility: Experience of Tenderer	
Technical o	or Functionality Evaluation	
T2.2.16	Experience of Tenderer	44
T2.2.17	Proposed Organisation and Staffing	45
T2.2.18	Key Personnel	46
T2.2.19	Experience of Key Personnel	47
T2.2.20	Preliminary Programme	60
T2.2.21	Construction Approach, Methodology, and Quality Control	61
T2.2.22	Schedule of Proposed Subcontractors	62
T2.2.23	Plant and Equipment	63
T2.2.24	Contractor's Health and Safety Plan	64

T2.2 RETURNABLE SCHEDULES, FORMS, AND CERTIFICATES

The returnable schedules, forms, and certificates, as listed in T2.1.2, can be found on pages 22 to 40.

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NOTE

The Form of Offer (C1.1.1), The Data to be Provided by Contractor (C1.2.2.2), and the Bill of Quantities (C2.2) are also required to be completed by the tenderer.

T2.2.1 COMPULSORY ENTERPRISE QUESTIONNAIRE

<u>Ref</u>	<u>Description</u>		plete or pplicable
1.1	Name of enterprise		
1.2	Name of enterprise's representative		
1.3	ID Number of enterprise's representative		
1.4	Position enterprise's representative occupies in the enterprise		
1.5	National Treasury Central Supplier Database Registration number	MAAA	
1.6	eThekwini Supplier Database: Reference number (PR), if any:	PR	
1.7	VAT registration number, if any:		
1.8	CIDB registration number, if any:		
1.9	Department of Labour: Registration number		
1.10	Department of Labour: Letter of Good Standing Certificate number		
2.0	Particulars of sole proprietors and partners i	n partnerships (attach separate	pages if more than 4 partners)
	Full Name	Identity No.	Personal income tax No. *
2.1			
2.2			
2.3			
2.4			
3.0			
	Particulars of companies and close corporati	ons	
3.1	Particulars of companies and close corporation company registration number, if applicable:	ons	
3.1		ons	
	Company registration number, if applicable:	ons	

Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater Treatment Works: Electro-Mechanical Upgrades

4.0	Record in the service of the state (Insert on a s	eparate page if nec	essary)			
	Indicate by marking the relevant boxes with a manager, principal shareholder or stakeholde the last 12 months in the service of any of the	a cross, if any so er in a company	ole pro	oprietor, partner i	•	•
	a member of any municipal council			a member of any pro	ovincial legi	slature
	an official of any municipality or municipal entity	/		a member of an acco	_	hority of any national
	a member of the board of directors of any munic	cipal entity		a member of the Nat Council of Province	tional Assei	mbly or the National
	an employee of any provincial department, nation public entity or constitutional institution within the Public Finance Management Act, 1999 (Act 1	the meaning of		an employee of Parli	ament or a	provincial legislature
	Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution	-	olic office, board or ion held		tatus of service ppropriate column)
			•		Current	Within last 12 mths
5.0	Record of spouses, children and parents in t	he service of th	e stat	e (Insert on a separat	te page if n	ecessary)
	Indicate by marking the relevant boxes with in a partnership or director, manager, princi is currently or has been within the last 12 mo	pal shareholder	or st	akeholder in a cor	mpany oi	
	a member of any municipal council			a member of any pro	ovincial legi	slature
	an official of any municipality or municipal entity	/		a member of an acco	_	hority of any national
	a member of the board of directors of any munic	cipal entity		a member of the Nat Council of Province	tional Asse	mbly or the National
	an employee of any provincial department, nation public entity or constitutional institution within the Public Finance Management Act, 1999 (Act 2)	the meaning of			ament or a	provincial legislature
	Name of spouse, child or parent	Name of institution	-	olic office, board or ion held	_	tatus of service ppropriate column)
					Current	Within last 12 mths
					į.	
i) ii)	undersigned, who warrants that he / she is duly authorizes the employer to verify the tenderers to order. confirms that the neither the name of the enterpre wholly or partly exercises or may exercise, contestablished in terms of the Prevention and Combati	ix clearance statu ise or the name or rol over the ent	is fron of any erprise	n the South African partner, manager, e appears on the F	Revenue	or other person, who
	confirms that no partner, member, director or othe	-			may exer	cise, control over the
iv)	enterprise appears, has within the last five years be confirms that I / we are not associated, linked or inv no other relationship with any of the tenderers or	olved with any ot	her te	ndering entities sub	_	
v)	interpreted as a conflict of interest. confirms that the contents of this questionnaire are and correct.	within my perso	nal kno	owledge and are to	the best o	f my belief both true
	IE (Block Capitals):					Date
SIGI	NATURE:					

T2.2.2 CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING / SITE INSPECTION

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Reference is to be made to Clauses F.2.1(c) and F.2.7 of the Tender Data.

This is to ce	rtify that:				
(tende	(tenderer name):				
of	(address):				
•	nted by the person(s) named below at the stated in the Tender Data (F.2.7).	Clarification Meeting held for all tenderers, the details			
I / We acknowledge that the purpose of the meeting was to acquaint myself / ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for me / us to take account of everything necessary when compiling our rates and prices included in the tender.					
Particulars	of person(s) attending the meeting:				
Name:		Name:			
Signature:		Signature:			
Capacity:		Capacity:			
	of the above person(s) at the meetive, namely:	eting is confirmed by the Employer's Agent's			
Name:					
Signature:					
Date:					

T2.2.3 TAX COMPLIANCE STATUS PIN / TAX CLEARANCE CERTIFICATE

Reference is to be made to Clauses F.2.23 and F.3.13(a) of the Tender Data.

SARS has introduced a new Tax Compliance Status System. Tenderers can submit a Tax Compliance Status PIN (TCS PIN) instead of an original Tax Clearance Certificate. This TCS PIN can be used by third parties to certify the taxpayer's real-time compliance status.

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Separate Tax Clearance Certificates / TCS PINs are required for each entity in a Joint Venture.

The TCS PIN(s) are to be entered under item 3.4 on form **T2.1.2.1: Compulsory Enterprise Questionnaire**.

Tenderers are to include, at the back of their tender submission document, a printout of their Tax Compliance Status PIN (TCS PIN) OR an original Tax Clearance Certificate.

Failure to include the required document will make the tender submission non-responsive.

I, the undersigned, who warrants that they are authorised to sign on be confirms that the information contained in this form is within my personal knowledge true and correct, and that the requested documentation has been included.	e and is to the best of my belief both
NAME (Block Capitals):	Date

NAME (Block Capitals):	Date
SIGNATURE:	

T2.2.4 CONTRACTOR'S HEALTH AND SAFETY DECLARATION

If Functionality is applicable as part of tender evaluation, reference is to be made to Clause F3.11.9 of the of the Conditions of Tender.

Reference is to be made to Clauses F.2.1(e) and F.2.23 of the Tender Data.

In terms of Clause 5(1)(h) of the OHSA 1993 Construction Regulations 2014 (referred to as "the Regulations" hereafter), a Principal Contractor may only be appointed to perform construction work if the Client is satisfied that the Principal Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHSA 1993 Construction Regulations 2014.

To that effect, a person duly authorised by the tenderer, must complete and sign the declaration hereafter in detail.

Declaration by Tenderer

- I, the undersigned, hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
- I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
- I propose to achieve compliance with the Regulations by one of the following (Tenderers are to Circle Applicable Yes or No):
 - (a) From my own competent resources as detailed in 4(a) hereafter.
 - (b) From my own resources still to be appointed or trained until competency is achieved, as detailed in 4(b) hereafter:
 - (c) From outside sources by appointment of competent specialist Subcontractors as detailed in 4(c) hereafter:

	Circle Applicable		
	Yes	NO	
is	Yes	NO	
n	YES	NO	

- 4 Details of resources I propose:
 - (Note: Competent resources shall include safety personnel such as a construction supervisor and construction safety officer as defined in Regulation 8, and competent persons as defined in Regulations 9, 10, 11, 12, 13, 14, 16, 17, 20, 21, 22, 23(1), 24, 25, 26, 27, 28 and 29, as applicable).
 - (a) Details of the competent and qualified key persons from my company's own resources, who will form part of the contract team:

NAMES OF COMPETENT PERSONS	POSITIONS TO BE FILLED BY COMPETENT PERSONS

(b)	Details of training of persons from my company's own resource to achieve the necessary competency:	es (or to be hired) who still have to be trained
	(i) By whom will training be provided?	
	(ii) When will training be undertaken?	
	(iii) Positions to be filled by persons to be trained or hired:	
(c)	Details of competent resources to be appointed as subcontraction own company:	ctors if competent persons cannot be supplied
	Name of proposed subcontractor:	
	Qualifications or details of competency of the subcontractor:	
5	I, the undersigned, hereby undertake, if this tender is accept works under the contract, a suitable and sufficiently documen Regulation 7(1) of the Construction Regulations, which plan sha	ted Health and Safety Plan in accordance with
6	I, the undersigned, confirm that copies of this company's appropriate times be available for inspection by the Principal Contractor's performance, and officials and inspectors of the Department of the Departmen	ons 2014 will be provided on site and will at all ersonnel, the Client's personnel, the Employer's
7	I, the undersigned, hereby confirm that adequate provision has the Bill of Quantities to cover the cost of all resources, action envisaged in the OHSA 1993 Construction Regulations 2014, and be applied by the Client in terms of the said Regulations (Regulation part to comply with the provisions of the Act and the Regulation	s, training and all health and safety measures d that I will be liable for any penalties that may tion 33) for failure on the Principal Contractor's
8	I, the undersigned, agree that failure to complete and execute will mean that this company is unable to comply with the Regulations (2014) and accept that this tender will be prejudice Client.	requirements of the OHSA 1993 Construction
	the undersigned, who warrants that they are authorised to sign of ation contained in this form is within my personal knowledge and	
NAME	(Block Capitals):	Date
SIGN	ATURE:	

T2.2.5 MBD 4: DECLARATION OF INTEREST

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

- (a) a member of:
 - (i) any municipal council.
 - (ii) any provincial legislature.
 - (iii) the national Assembly or the national Council of provinces.
- (b) a member of the board of directors of any municipal enterprise.
- (c) an official of any municipality or municipal enterprise.
- (d) an employee of any national or provincial department, national or provincial public enterprise 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 enterprise.
- (f) an employee of Parliament or a provincial legislature.

"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.

- 1 No bid will be accepted from persons in the service of the state¹.
- Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.
- In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1	Name of enterprise
	Name of enterprise's representative

- 3.2 ID Number of enterprise's representative
- 3.3 Position enterprise's representative occupies in the enterprise
- 3.4 Company Registration number
- 3.5 Tax Reference number
- 3.6 VAT registration number

Complete T2.1.2.1 Item 1.1
Complete T2.1.2.1 Item 1.2
Complete T2.1.2.1 Item 1.3
Complete T2.1.2.1 Item 1.4
Complete T2.1.2.1 Item 3.1 or 3.2
Complete T2.1.2.1 Item 3.3
Complete T2.1.2.1 Item 1.7

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3.7 The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted.

		Circle Ap	plicable
3.8	Are you presently in the service of the state?	YES	NO
	If yes, furnish particulars:		
3.9	Have you been in the service of the state for the past twelve months?	YES	NO
	If yes, furnish particulars:		

	3.10 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 yes, furnish particulars:						
	3.11 Are you, aware of any relation and any persons in the service and or adjudication of this bid	e of the state who may be	•		YES	NO	
	If yes, furnish particulars:						
	3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?				YES	NO	
	If yes, furnish particulars:						
	3.13 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 yes, furnish particulars:						
	3.14 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?					NO	
	The names of all directors / trustees / shareholders / members / sole proprietors / partners in partnerships, their individual identity numbers and state employee numbers must be indicated below. In the case of a joint venture, information in respect of each partnering enterprise must be completed and submitted						
	Full Name	Identity No.	State Employee No.	Person	al income	tax No.	
		Use additional pages if	necessary				
	the undersigned, who warrants tha nation contained in this form is within						
NAME	(Block Capitals):				Date		
SIGNA	ATURE:						

4

T2.2.6 MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

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

			Circ Applica	
1.0	Are	ou by law required to prepare annual financial statements for auditing?	YES	NO
	1.1	If YES, submit audited annual financial statements for the past three years date of establishment if established during the past three years.	ars or sin	ice the
2.0	towa	you have any outstanding undisputed commitments for municipal services rds any municipality for more than three months or any other service provider spect of which payment is overdue for more than 30 days?	YES	NO
	2.1	If NO, this serves to certify that the bidder has no undisputed commitments for metowards any municipality for more than three months or other service provider in payment is overdue for more than 30 days.	-	
	2.2	If YES, provide particulars.		
3.0	year	any contract been awarded to you by an organ of state during the past five s, including particulars of any material non-compliance or dispute concerning execution of such contract?	YES	NO
	3.1	If YES, provide particulars.		
4.0	so,	any portion of goods or services be sourced from outside the Republic, and, if what portion and whether any portion of payment from the municipality / cipal entity is expected to be transferred out of the Republic?	YES	NO
	4.1	If YES, provide particulars.		
		by 1.1 above, tenderers are to include, at the back of their tender submise f their audited annual financial statements.	sion docu	ıment, a
infor	matior	undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, co o contained in this form is within my personal knowledge and is to the best of my belief bo d, if required, that the requested documentation has been included in the tender s	oth true and	d correct,
NAM	E (Blo	ock Capitals):	Date	
SIGN	IATUF	RE:		

T2.2.7 MBD 6.1: PREFERENCE POINTS CLAIM In terms of THE PREFERENTIAL PROCUREMENT REGULATIONS (2022)

Reference is to be made to Clause F.3.11 of the Tender Data.

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

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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

1.0 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).
- 1.2 The applicable preference point system for this tender is the 80/20 preference point system.
- 1.3 Preference Points for this tender shall be awarded for:
 - Price and Specific Goals: Either 80 or 90 (price) and 20 or 10 (specific goals), in terms of 1.2 above.
 - The total Preference Points, for Price and Specific Goals, is 100.
- 1.4 Failure on the part of the tenderer to submit the required proof or documentation, in terms of the requirements in the Conditions of Tender for claiming specific goal preference points, will be interpreted that preference points for specific goals are not claimed.
- 1.5 The Municipality 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 of preferences, in any manner required by the Municipality.

2.0 **DEFINITIONS**

- 2.1 "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.
- 2.2 "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts.
- 2.3 "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes.
- 2.4 "tender for income-generating contracts" means a written offer in the form determined by Municipality 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 Municipality and a third party that produces revenue for the Municipality, 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.
- 2.5 "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3.0 FORMULA FOR CALCULATION OF PREFERENCE PRICE POINTS

3.1 PROCUREMENT OF GOODS AND SERVICES

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

80 / 20 Points System

OR

90 / 10 Points System

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

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

Where:

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

4.0 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 goal(s) stated in **Table 1** below, as supported by proof/ documentation stated in the **Conditions of Tender**:
- 4.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of:
 - (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system, or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

TABLE 1: Specific Goals for the tender and points claimed are indicated per the table below.

Tenderers are to indicate their points claim for each of the Specific Goals.

The Specific Goals to be allocated points in terms of this tender	Number of points ALLOCATED (80/20 system)	Number of points ALLOCATED (90/10 system)	Number of points CLAIMED (80/20 system)	Number of points CLAIMED (90/10 system)
Ownership Goal: Race: Black (w1) Gender: Female (w2) Disabilities (w3)	20	N/A		N/A

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Should the municipality apply a combination of Specific Goals, the **points for the individual goals** will be weighted according to the **Goal Weightings** specified in the Tender Data (Clause F.3.11) to arrive at the final points for **Preferential Points for Specific Goals**.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, certify that the points claimed, based on the specific goals as specified in the tender, qualifies the tendering entity for the preference(s) shown.

I acknowledge that:

- The information furnished is true and correct.
- The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- 3) 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.
- 4) 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.

NAME (Block Capitals):	Date
SIGNATURE:	

T2.2.8 MBD 8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1.0 This Municipal Bidding Document must form part of all bids invited.
- 2.0 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.
- 3.0 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a) abused the municipal entity's supply chain management system or committed any improper conduct in relation to such system.
 - b) been convicted for fraud or corruption during the past five years.
 - c) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years.
 - 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).

4.0	In order to give effect to the above, the following questions must be completed and submitted with the bid.			
		Circle Applicable		
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer / Authority of the institution that imposed the restriction after the audi alteram partem rule was applied.) The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	YES	NO	
	4.1.1 If YES, provide particulars.			
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	YES	NO	
	4.2.1 If YES, provide particulars.			
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	YES	NO	
	4.3.1 If YES, provide particulars.			

Treatment Works: Electro-Mechanical Upgrades 4.4 Does the bidder or any of its directors owe any municipal rates and taxes or municipal YES NO charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months? 4.4.1 If YES, provide particulars. 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 YES NO comply with the contract? 4.5.1 If YES, provide particulars. I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct. I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to

Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater

be false.

SIGNATURE:

NAME (Block Capitals):

Contract No: PSC 2022/018

Date

T2.2.9 MBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

NOTES

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

- Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
- 1.0 This Municipal Bidding Document (MBD) must form part of all **bids**¹ invited.
- 2.0 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or **bid rigging**).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3.0 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;
 - 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
 - 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.
- 4.0 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**.
- 5.0 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

Contract No: PSC 2022/018

I, the undersigned, in submitting the accompanying bid:
(B) N = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =
(Bid Number and Description)
in response to the invitation for the bid made by:
(Name of Municipality / Municipal Entity)
do hereby make the following statements that I certify to be true and complete in every respect.
I certify, on behalf of:
(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.
 - (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 consortium³ will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:

- (a) prices.
- (b) geographical area where product or service will be rendered (market allocation).
- (c) methods, factors or formulas used to calculate prices.
- (d) the intention or decision to submit or not to submit, a bid.
- (e) the submission of a bid which does not meet the specifications and conditions of the bid.
- (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.

NAME (Block Capitals):	Date
SIGNATURE:	

T2.2.10 JOINT VENTURES AGREEMENTS

Joint Venture agreement and Power of Attorney Agreements to be attached here (if applicable).

T2.2.11 RECORD OF ADDENDA TO TENDER DOCUMENTS

I / We confirm that the following communications received from the Employer or his representative before the date of submission of this tender offer, amending the tender documents, have been taken into account in this tender offer.

ADD.No	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.
It is also confirmed that the requirements, as stated on the Addenda, have been complied with.

NAME (Block Capitals):	Date
SIGNATURE:	

T2.2.12 ELIGIBILITY: DECLARATION OF MUNICIPAL FEES

Reference is to be made to Clause F.2.1(f)(ii) of the Tender Data.

I, the undersigned, do hereby declare that the Municipal fees of:
(full name of Company / Close Corporation / partnership / sole proprietary/Joint Venture)

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(hereinafter referred to as the TENDERER) are, as at the date hereunder, fully paid or an Acknowledgement of Debt has been concluded with the Municipality to pay the said charges in instalments.

The following account details relate to property of the said TENDERER:

Account	Account Number: to be completed by tenderer								
Consolidated Account									
Electricity									
Water									
Rates									
JSB Levies									
Other									

I acknowledge that should the aforesaid Municipal charges fall into arrears, the Municipality may take such remedial action as is required, including termination of any contract, and any payments due to the Contractor by the Municipality shall be first set off against such arrears.

- Where the tenderer's place of business or business interests are outside the jurisdiction of eThekwini municipality, a copy of the accounts/ agreements from the relevant municipality are to be provided.
- Where the tenderer's Municipal Accounts are part of their lease agreement, then a copy of the agreement, or an official letter to that effect, is to be provided.

Tenderers are to include, at the back of their tender submission document, a printout of the above account's and or agreements signed with the municipality.

Failure to include the required document will make the tender submission non-responsive.

confirms that the informa	rsigned, who warrants that they are authorised to sign on be tion contained in this form is within my personal knowledge nd that the requested documentation has been included	and is to the best of my belief both
NAME (Block Capitals):		Date
SIGNATURE:		-

T2.2.13 ELIGIBILITY: REGISTRATION WITH COMPENSATION COMMISSIONER

Reference is to be made to Clause F.2.1(f)(i) of the Tender Data.

The Occupational Injuries and Diseases Act (130 of 1993 as amended) (the Act) refers. A summary of the pertinent Clauses are listed below. The act is to be referenced for the full text of the clauses.

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Clause 80: Employer to register with commissioner and furnish him with particulars

The Act requires that an employer carrying out business in the Republic to register with the Compensation Commissioner. Any person who fails to comply with the provisions of the this clause is guilty of an offence.

Clause 82: Employer to furnish returns of earnings

The Act requires an employer to furnish the commissioner with a return showing:

- The amount of earnings paid by him to his employees.
- Any further information as may be prescribed or as the commissioner may require.

Any employer who fails to comply with the provisions of the this clause is guilty of an offence.

Clause 86: Assessment to be paid by an employer to commissioner

The Act states that an employer will receive notices of assessment from the commissioner. The employer must pay the commissioner the assessment amount on the notices.

Clause 89: Mandators and contractors

The Act requires a contractor (a person with a contract with a mandator) to register as an employer in accordance with the provisions of the Act and pay the necessary assessments. Failing registration or payment of assessments, the mandator is required to pay the assessments in respect of the employees of the contractor. The mandator is allowed to recover the assessment amounts paid from the contractor.

The Department of labour issues contractors with a **Letter of Good Standing** if the contractor has complied with the requirement(s) of the Act and is in "good standing" with the Compensation Fund. Employers can check the validity of such Letters of Good Standing on the internet (https://cfonline.labour.gov.za/VerifyLOGS).

Tenderers are to include, at the back of their tender submission document, a printout of their most recent Letter of Good Standing from the Department of Labour.

Failure to include the required document will make the tender submission non-responsive.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct, and that the requested documentation has been included in the tender submission.					
NAME (Block Capitals):		Date			
SIGNATURE:		·			

T2.2.14 ELIGIBILITY: CSD REGISTRATION REPORT

Reference is to be made to Clauses F.2.1(e) and F.2.23 of the Tender Data.

The Conditions of Tender, Clause F.2.1: Eligibility, requires a tenderer to be registered, at the time of tender closing, on the **National Treasury Central Supplier Database (CSD)** as a service provider.

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CSD Registration Reports can be obtained from the National Treasury's CSD website at https://secure.csd.gov.za/Account/Login.

The date of obtaining the printout is to be indicated on the printout.

The following is an example of the beginning of the printout obtained from the above website.

CENTRAL SUPP DATABASE FOR GOVERNMENT	LIER Report Ran	
CSD	REGISTRATION REPORT	
-A - A - A		
	SUPPLIER IDENTIFICATION	
Supplier number	Have Bank Account	
Is supplier active?	Total annual turnover	
Supplier type	Financial year start date	- 8
Supplier sub-type	Registration date	_
Legal name	Created by	
Trading name	Created date	
Identification type	Edit by	
Government breakdown	Edit date	-
Business status	Restricted Supplier	-
Country of origin	Restriction Last Verification Date	-
South African company/CC registration number	THE REPORT OF THE PARTY OF THE	

Tenderers are to include, at the back of their tender submission document, a printout of their (full) CSD Registration Report.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer,

	tion contained in this form is within my personal knowledge nd that the requested documentation has been included	•
NAME (Block Capitals):		Date
SIGNATURE:		

T2.2.16 EXPERIENCE OF TENDERER

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

The following is a statement of works <u>of similar nature</u> (in relation to the scope of works) recently (within the past 15 years) executed by myself / ourselves.

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Tenderers are to submit copies of signed completion certificates for all projects submitted.

EMPLOYER: CONTACT PERSON AND TELEPHONE NUMBER	CONSULTING ENGINEER: CONTACT PERSON AND TELEPHONE NUMBER	NATURE OF WORK	VALUE OF WORK (inclusive of VAT)	DATE COMPLETED

Attach additional pages if more space is required

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.		
NAME (Block Capitals):		Date
SIGNATURE:		

T2.2.17 PROPOSED ORGANISATION and STAFFING

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

The tenderer should propose the structure and composition of their team i.e. the main disciplines involved, the key staff member / expert responsible for each discipline, and the proposed technical and support staff and site staff.

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The roles and responsibilities of each key staff member / expert should be set out as job descriptions. In the case of an association / joint venture / consortium, it should, indicate how the duties and responsibilities are to be shared.

The tenderer must <u>attach</u> his / her organization and staffing proposals to this page. (this is to include both the on-site and off-site staffing resources used for this project)

In addition to any lists, this information should also be shown in an organogram format (flow chart) clearly indicating the staff hierarchy and reporting lines, again for on- and off-site resources.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

,	who warrants that they are authorised to sign on behalf of the this form is within my personal knowledge and is to the bes	•
NAME (Block Capitals):		Date
SIGNATURE:		-

T2.2.18 KEY PERSONNEL

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

The Tenderer shall list below the personnel which he intends to utilize on the Works, including key personnel (Contract's Manager, Site Agent, and Foremen) which may have to be brought in from outside if not available locally.

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	NUMBER OF PERSONS		
CATEGORY OF EMPLOYEE	KEY PERSONNEL, PART OF THE CONTRACTOR'S ORGANISATION	KEY PERSONNEL TO BE IMPORTED IF NOT AVAILABLE LOCALLY	
Site Agent, Project Managers			
Foremen, Quality Control and Safety Personnel			
Technicians, Surveyors, etc			
Artisans and other Skilled workers			
Plant Operators			
Unskilled Workers			
Others:			
Note: CVs of key personnel may be red			

Note: CVs of key personnel may be requested during the contract period.

	who warrants that they are authorised to sign on behalf of the this form is within my personal knowledge and is to the best	
NAME (Block Capitals):		Date
SIGNATURE:		

T2.2.19 EXPERIENCE OF KEY PERSONNEL

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

KEY STAFF	FULL NAME AND SURNAME
Project Lead	
Lead Civil Design Engineer	
Lead Mechanical Design Engineer	
Lead Electrical Design Engineer	
Lead Control and Instrumentation Design Engineer	

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For quality assurance, each Key Staff must satisfy the compulsory requirements listed in the table below:

Key Staff	Compulsory Requirements (in terms of Clause F.3.11.9 of the Tender Data)
	Ten (10) years of experience or more on projects relating to the design and construction monitoring of wastewater treatment plants. AND
Project Lead	BSc Degree/BTech Degree/ BEng Degree/NHD in Engineering (Civil/Mechanical/Electrical). AND
	Registration with ECSA as PR Eng/PR Tech Eng.
	Ten (10) years of experience or more on projects relating to civil and hydraulic design of wastewater treatment plants.
	AND
Lead Civil Design Engineer	BSc Degree/BTech Degree/ BEng Degree/NHD in Civil Engineering.
	AND
	Registration with ECSA as PR Eng/PR Tech Eng.
Lead Mechanical Design Engineer	Ten (10) years of experience or more on projects relating to the design of mechanical components for municipal or industrial wastewater treatment plants and/or pump stations. AND BSc Degree/BEng Degree/BTech Degree/NHD/NTD in Mechanical
	Engineering AND
	Registration with ECSA as PR Eng/PR Tech Eng/Pr.Cert.Eng

	Ten (10) years of experience or more on projects relating to the design of medium and low voltage electrical networks and motor control systems.
	AND
Lead Electrical Design Engineer	BSc Degree/BTech Degree/ BEng Degree/NHD/NTD in Electrical Engineering.
	AND
	Registration with ECSA as PR Eng/PR Tech Eng./Pr.Cert.Eng
	Ten (10) years of experience or more on projects relating to the design of industrial automation and control systems.
	AND
	BSc Degree/BTech Degree/BEng Degree/NHD in Electrical/Electronic Engineering.
Lead Control and Instrumentation	AND
Design Engineer	Registration with ECSA as PR Eng/PR Tech Eng.
	OR
	Non-registered professional with twenty (20) years of experience or more on projects relating to the design of industrial automation and control systems.

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The experience of assigned staff member in relation to the Scope of Work will be evaluated from three different points of view:

- 1) General experience (total duration of professional activity), level of education and training and positions held of each discipline specific team leader.
- 2) The education, training, skills and experience of the Assigned Staff in the specific sector, field, subject, etc which is directly linked to the scope of work.
- 3) The key staff members' / experts' knowledge of issues which the tenderer considers pertinent to the project e.g. local conditions, affected communities, legislation, techniques etc.

A CV of the contract manager, site agent(s) and general foreman of not more than 2 pages should be attached to this schedule:

Each CV should be structured under the following headings:

- a) Personal particulars
 - name
 - date and place of birth
 - place (s) of tertiary education and dates associated therewith
 - professional awards
- b) Qualifications (degrees, diplomas, grades of membership of professional societies and professional registrations)
- c) Skills
- d) Name of current employer and position in enterprise
- e) Overview of post-graduate / diploma experience (year, organization and position)
- f) Outline of recent assignments / experience that has a bearing on the scope of work

I, the undersigned, who warrants that they are authorised to sign information contained in this form is within my personal knowledge and	
NAME (Block Capitals):	Date
SIGNATURE:	

Contract No: PSC 2022/018

Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater Treatment Works: Electro-Mechanical Upgrades

QUALIFICATIONS AND EXPERIENCE OF PROJECT LEAD

The relevant person listed under key staff above shall complete all the required information below and sign the declaration at the end of this form.

Full Name &			
Surname:			
ID/ Passport No.:		Age:	
Name of Tertiary			
Institution Attended:			
Relevant			
Qualification/s			
Obtained (and year):			
Name of		Registration	
Professional		No.:	
Institution			
Registered With:			
EMPLOYMENT HISTORY	(To be listed in chronological order with r	eference to rel	evant experience
only)			
Pariod of Employment			Years of
Period of Employment	Name of Employer		Relevant
(MM/YY to MM/YY)			Experience
Total number of years of	<u> </u>		+
-	relevant experience:		
	relevant experience:		

Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater Treatment Works: Electro-Mechanical Upgrades

Note:

1. The tenderer must submit a brief CV (of not more than 4 pages) containing <u>relevant</u> work experience only. Ambiguous, vague, or unclear statements submitted in the CV will not be considered.

Contract No: PSC 2022/018

Declaration by Key Staff

I the undersigned, declare that all the information provided above and contained in my CV is a true reflection of myself, my qualifications and my experience.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:
confirms that the	who warrants that he/she is duly authorised to do so on contents attached hereto relative to the above are to the best of his/her belief both true and correct.	
NAME	:	(Block Capitals)
SIGNATURE	:	:

QUALIFICATIONS AND EXPERIENCE OF LEAD CIVIL DESIGN ENGINEER

The relevant person listed under key staff above shall complete all the required information below and sign the declaration at the end of this form.

Full Name &			
Surname:			
ID/ Passport No.:		Age:	
Name of Tertiary			
Institution Attended:			
Relevant			
Qualification/s			
Obtained (and year):			
Name of		Registration	
Professional		No.:	
Institution			
Registered With:			
EMPLOYMENT HISTORY	(To be listed in chronological order with r	eference to rel	<u>evant experience</u>
<u>only)</u>			
Period of Employment			Years of
(MM/YY to MM/YY)	Name of Employer		Relevant
· ,			Experience
Total number of years of	relevant experience:		

Note:

1. The tenderer must submit a brief CV (of not more than 4 pages) containing <u>relevant</u> work experience only. Ambiguous, vague, or unclear statements submitted in the CV will not be considered.

Contract No: PSC 2022/018

Declaration by Key Staff

I the undersigned, declare that all the information provided above and contained in my CV is a true reflection of myself, my qualifications and my experience.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:
confirms that the	who warrants that he/she is duly authorised to do so contents attached hereto relative to the above to the best of his/her belief both true and correct.	
NAME	:	(Block Capitals)
SIGNATURE		DATF [.]

(of person authorised to sign on behalf of the Tenderer)

QUALIFICATIONS AND EXPERIENCE OF LEAD MECHANICAL DESIGN ENGINEER

The relevant person listed under key staff above shall complete all the required information below and sign the declaration at the end of this form.

Contract No: PSC 2022/018

Full Name &			
Surname:			
ID/ Passport No.:		Age:	
Name of Tertiary			
Institution Attended:			
Relevant			
Qualification/s			
Obtained (and year):			
Name of		Registration	
Professional		No.:	
Institution			
Registered With:			
EMPLOYMENT HISTORY	(To be listed in chronological order with r	eference to rel	evant experience
only)			
Period of Employment			Years of
(MM/YY to MM/YY)	Name of Employer		Relevant
			Experience
Total number of years of	relevant experience:		

Note:

1. The tenderer must submit a brief CV (of not more than 4 pages) containing <u>relevant</u> work experience only. Ambiguous, vague, or unclear statements submitted in the CV will not be considered.

Declaration by Key Staff

I the undersigned, declare that all the information provided above and contained in my CV is a true reflection of myself, my qualifications and my experience.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:
confirms that the	who warrants that he/she is duly authorised to do so o contents attached hereto relative to the above are to the best of his/her belief both true and correct.	
NAME	:	(Block Capitals)
SIGNATURE	:	Ē:

QUALIFICATIONS AND EXPERIENCE OF LEAD ELECTRICAL DESIGN ENGINEER

The relevant person listed under key staff above shall complete all the required information below and sign the declaration at the end of this form.

Contract No: PSC 2022/018

Full Name &			
Surname:			
ID/ Passport No.:		Age:	
Name of Tertiary			
Institution Attended:			
Relevant			
Qualification/s			
Obtained (and year):			
Name of		Registration	
Professional		No.:	
Institution			
Registered With:			
EMPLOYMENT HISTORY	(To be listed in chronological order with r	eference to rel	evant experience
only)			
Period of Employment			Years of
(MM/YY to MM/YY)	Name of Employer		Relevant
(IVIIVI/ I I to IVIIVI/ I I)			Experience
Total number of years of	relevant experience:		
-			

Note:

1. The tenderer must submit a brief CV (of not more than 4 pages) containing <u>relevant</u> work experience only. Ambiguous, vague, or unclear statements submitted in the CV will not be considered.

Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater	Contract No: PSC 2022/018
Treatment Works: Flectro-Mechanical Ungrades	

Declaration by Key Staff

I the undersigned, declare that all the information provided above and contained in my CV is a true reflection of myself, my qualifications and my experience.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:
confirms that the	who warrants that he/she is duly authorised to do so on contents attached hereto relative to the above are to the best of his/her belief both true and correct.	
NAME	:	(Block Capitals)
SIGNATURE	:	i:

Full Name & Surname:

QUALIFICATIONS AND EXPERIENCE OF LEAD CONTROL AND INSTRUMENTATION DESIGN **ENGINEER**

The relevant person listed under key staff above shall complete all the required information below and sign the declaration at the end of this form.

ID/ Passport No.:		Age:	
Name of Tertiary			
Institution Attended:			
Relevant			
Qualification/s			
Obtained (and year):		1	
Name of		Registration	
Professional		No.:	
Institution			
Registered With:			
EMPLOYMENT HISTORY only)	(To be listed in chronologic	al order with reference to re	
Period of Employment			Years of
(MM/YY to MM/YY)	Name of Employer		Relevant
,			Experience
Total number of years of	relevant experience:		
Note:			

Part T2: Returnable Documents

The tenderer must submit a brief CV (of not more than 4 pages) containing <u>relevant</u> work experience only.

Ambiguous, vague, or unclear statements submitted in the CV will not be considered.

Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater

Treatment Works: Electro-Mechanical Upgrades

Contract No: PSC 2022/018

		-		
വെ	laration	hv	KΔV	Staff
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I the undersigned, declare that all the information provided above and contained in my CV is a true reflection of myself, my qualifications and my experience.

NAME	:	(Block Capitals)
SIGNATURE	:	DATE:
confirms that the	who warrants that he/she is duly authorised to do so contents attached hereto relative to the above a to the best of his/her belief both true and correct.	
NAME	:	(Block Capitals)
SIGNATURE	:	TE:
	(of person authorised to sign on behalf of the Tenderer)	

T2.2.20 PRELIMINARY PROGRAMME

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this Contract. The programme shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of his Tender.

Contract No: PSC 2022/018

PROGRAMME											
ACTIVITY					WEE	KS/	MON	THS			

Note: The programme must be based on the completion time as specified in the Contract Data.

,	who warrants that they are authorised to sign on behalf of the this form is within my personal knowledge and is to the best o	
NAME (Block Capitals):		Date
SIGNATURE:		

T2.2.21 CONSTRUCTION APPROACH, METHODOLOGY, AND QUALITY CONTROL

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

Construction Approach and Methodology

The construction approach and methodology must respond to the Scope of Work and outline the proposed approach to undertake the work showing a detailed programme including health and safety aspects, the use of plant and resources for this Project.

Contract No: PSC 2022/018

Quality Control

The quality control statement must discuss what tests and control measures are to be employed on site to attain the specified results and is to cover the program associated activities.

The tenderer must attach his / her Construction Methodology and Quality Control information to this page.

	the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the tion contained in this form is within my personal knowledge and is to the best of my belief both true and correc		
NAME (Block Capitals):		Date	
SIGNATURE:			

T2.2.22 SCHEDULE OF PROPOSED SUBCONTRACTORS

The following firms have been identified as possible subcontractors for work in this contract.

NAMES AND ADDRESSES OF PROPOSED SUBCONTRACTORS	NATURE AND EXTENT OF WORK TO BE SUBCONTRACTED	PREVIOUS EXPERIENCE WITH SUBCONTRACTOR
	1	
	-	
	_	
	_	
	_	
	_	
ch additional pages if more space is requ	uired	
I, the undersigned, who warrants that they are a rmation contained in this form is within my person	authorised to sign on behalf of the nal knowledge and is to the best	e Tenderer, confirms that the of my belief both true and cor
/IE (Block Capitals):		Date

T2.2.23 PLANT and EQUIPMENT

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

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

Contract No: PSC 2022/018

(a)	Details of major equipment that is owned b	/ me / us and immediately available for this contract
-----	--	---

DESCRIPTION (type, size, capacity etc)	QUANTITY	YEAR OF MANUFACTURE

Attach additional pages if more space is required

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

	QUANTITY	HOW ACQUIRED	
DESCRIPTION (type, size, capacity etc)		HIRE/ BUY	SOURCE

Attach additional pages if more space is required

The Tenderer undertakes to bring onto site without additional cost to the Employer any additional plant not listed but which may be necessary to complete the contract within the specified contract period.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.			
NAME (Block Capitals):		Date	
SIGNATURE:		•	
		•	

T2.2.24 CONTRACTOR'S HEALTH AND SAFETY PLAN

Refer to Clause F3.11.9 for Functionality Points evaluation prompts (if applicable).

At tender stage only a brief overview (**to be attached to this page**) of the tenderers perception on the safety requirements for this contract will be adequate.

Contract No: PSC 2022/018

Only the successful Tenderer shall submit separately the Contractor's Health and Safety Plan as required in terms of Regulation 7 of the Occupational Health and Safety Act 1993 Construction Regulations 2014.

The detailed safety plan will take into consideration the site specific risks as mentioned under C.3: Project Specification. A generic plan will not be acceptable.

I, the undersigned, who warrants that they are authorised to sign on behalf of the Tenderer, confirms that the information contained in this form is within my personal knowledge and is to the best of my belief both true and correct.		
NAME (Block Capitals):	Date	
SIGNATURE:	_	

PART C1: AGREEMENT AND CONTRACT DATA

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.1: OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

Contract No: PSC 2022/018

Contract Title: Provision of Multi-disciplinary Engineering Consulting Services for the Southern

Wastewater Treatment Works: Electro-Mechanical Upgrades

The Tenderer, 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 Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer 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:			
R	(In words		
)	
Acceptance and returnin stated in the Tender Da	g one copy of this document to	ning the Acceptance part of this Form of Offer and of the Tenderer before the end of the period of validity becomes the party named as the Contractor in the	
For the Tenderer:			
* Name of Tenderer (org	ganisation)	:	
* Signature (of person a	uthorized to sign the tender)	:	
* Name (of signatory in c	capitals)	:	
Capacity (of Signatory)		:	
Address	:		
	:		
Telephone	:		
Witness:			
Signature	:	Date :	
Name (in capitals) :	:		
Notes:			

* Indicates what information is mandatory.

Failure to complete the mandatory information and sign this form will invalidate the tender.

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.2: FORM OF ACCEPTANCE

By signing this part of the Form of Offer and Acceptance, the Employer identified below accepts the Tenderer'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 Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

Contract No: PSC 2022/018

The terms of the contract are contained in:

Part C1: Agreement and Contract Data, (which includes this Agreement)

• Part C2: Pricing Data, including the Bill of Quantities

Part C3 : Scope of WorkPart C4 : Site Information

and the schedules, forms, drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

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 Tenderer 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 representatives of both parties.

The Tenderer 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 fulfill 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 Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (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 (person authorized to sign the acceptance)		:	
Name (of signatory in capitals)		:	
Capacity (of Signatory)		:	
Name of Employer (organisation)		:	
Address	:		
Witness:	:		
Signature	:	Dat	e :
Name(in capitals):			

This form will be completed by THE EMPLOYER and ONLY THE SUCCESSFUL TENDERER

C1.1: FORM OF OFFER AND ACCEPTANCE C1.1.3: SCHEDULE OF DEVIATIONS

Subject	:		
Details			
Details	:		
	:		
Subject	:		
Details	:		
	:		
Subject	:		
Details	:		
	:		
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C1.2: CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract are the Standard Professional Services Contract (Third edition: July 2009) published by the Construction Industry Development Board. (see www.cidb.co.za - copied for ease of reference in C4.2).

Contract No: PSC 2022/018

The Contract Data (including variations and additions) shall amplify, modify or supersede, as the case may be, the Standard Professional Services Contract, to the extent specified below, and shall take precedence and shall govern.

Each item of data given below is cross-referenced to the clause in the Standard Professional Services Contract to which it mainly applies.

C1.2.2 CONTRACT DATA

C1.2.2.1 DATA TO BE PROVIDED BY THE EMPLOYER

The Employer is the eThekwini Municipality as represented by: Deputy Head: Sanitation Operation

3.4 & The authorised and designated Employer's Agent is: Sibusiso Vilane

The authorised and designated Employers Agent's Representative is Ritesh Kandhai

- 4.3.2 The contact details of the Employers Agent's Representative are:
 - Telephone : 031 311 4875 (t)
 - E-mail : Ritesh. Kandhai @durban.gov.za

The address for the Receipt of communications is: Water and Sanitation Unit, 3 Prior Road Durban 4000

- The Project is: PSC 2022/018- Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater Treatment Works: Electro-Mechanical Upgrades
- 1 Period of Performance: 36 months from the contract start date.
- 1 Start Date : date of receipt of signed completed contract document,

including schedule of deviations (if any), by the service

provider.

- 3.4.1 Communications by e-mail is permitted provided confirmation thereof is acknowledged by the recipient within 2 days.
- 3.5 The location for the performance of the Project is: Southern Wastewater Treatment Works.

Contract No: PSC 2022/018

3.6 The Service Provider may not release public or media statements or publish material related to the Services or Project under any circumstances. 3.12 The penalty per Day payable is: R 3800.00 (limited to 10% of the contract value). 3.15.1 The programme shall be submitted within 28 Days of the Contract award date. 3.15.2 The Service Provider shall update the programme at intervals not exceeding 6 weeks. The time-based fees shall not be adjusted for inflation. 3.16 The Service Provider is required to assist in the obtaining relevant approvals, licenses and permits 4.3.1(d) from the state, regional and municipal authorities having jurisdiction over the Project. 4.7 The Basic Fee tendered is to include for all the duties as defined in the latest ECSA Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act for normal duties and is to provide for all category factors. The time related fees for additional services and disbursements will be paid as tendered. 5.4.1 The Service Provider is required to provide Professional indemnity in an amount of: R 10 000 000.00, which shall be specific to this contract. 5.5 The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions: 1) Sub-contracting any portion of the works 2) Appointment of Sub-Consultants 3) Additional works of any nature 7.2 The Service Provider is required to provide key personnel in accordance with the provisions of clause 7.2 and to complete the relevant key personnel schedules under Returnable Documents. 8.1 The Service Provider is to commence the performance of the Services within 21 Days of the contract award date. 8.2.1 The Contract is concluded when: the period of performance has been reached. This, however, does not preclude fulfilment of all obligations under this contract. 8.3.3 The costs incurred by the Service Provider to suspend, delay or reactivate the contract due to

services, on personnel committed to the project at the time of the Force Majeure event.

Force Majeure shall be claimed by the Service Provider on a time cost basis as additional

- 8.4.1 Add the following to this Clause:
 - f. Where the Service Provider fails to meet the deliverables in terms of the contract programme.

Contract No: PSC 2022/018

- Where the Service Provider fails to comply with the minimum Functionality requirements.
- 8.4.3(c) The period of suspension under clause 8.5 is not to exceed 6 months.
- 8.4.4 Costs due to termination to be paid to the Service Provider are limited to the following:
 - All outstanding costs incurred up to the point of termination.
 - Plus 10% of the remaining value of the Normal Services fee that would have been due to the Service Provider had the contract not been terminated.

Note: This Clause supersedes Clause 4.3.7 of the ECSA Guidelines

- 8.5.1 The period of suspension is not to exceed **6 months**.
- 8.5.2 The costs incurred by the Service Provider to suspend the contract shall be claimed on a time and cost basis as additional services for personnel committed to the project when the notice of suspension is received and the cause for such suspension is of no fault of the Service Provider.
- 9.1 Copyright of documents prepared for the Project shall be vested with the **Employer**.
- 11.1 The Service Provider may subcontract any work which he has the skill and competency to perform in order to achieve his CPG target (in line with the conditions of clause 5.5).
- 12.1 Interim settlement of disputes is to be by **Adjudication**.
- 12.1.3 Final settlement is by **Arbitration**.
- 12.3.3 The adjudicator is the person appointed by mutual agreement between both parties.
- 13.1.3 All parties in a joint venture or consortium shall carry a minimum professional indemnity insurance of **R 10 000 000.00**.
- 13.4 Neither the Employer nor the Service Provider is liable for any loss or damage resulting from any occurrence unless a claim is formally made within 36 months from the date of termination or completion of the Contract.
- 13.5.1 The maximum amount of compensation payable by the Service Provider in respect of liability under the Contract is limited to R 20 million (excluding VAT).
- The Service Provider is to ensure that third party cover is catered for under the requirements of 5.4, up to the value stated.

15

due.

C1.2.2.2	DATA TO BE PROVIDED BY CONTRACTOR
1.1.1.9	The legal name of Contractor is:
1.2.1.2	The Physical address of the Contractor is:
	The Postal address of the Contractor is:
	The contact numbers of the Contractor are:
	Telephone:
	Fax:
	The E-Mail address of the Contractor is:

The interest rate will be prime interest rate of the Employers bank at the time that the amount is

C1.2.3 ADDITIONAL CONDITIONS OF CONTRACT

C1.2.3.1 CONTRACT PARTICIPATION GOAL (CPG)

It is a condition of contract that the contractor must allow for a minimum of **13%** of the contract value (excluding PC Sum items and Fixed Cost allowances) to be subcontracted to contractors who are **>51% PPG** (Priority Population Group) owned. Proof of payment to the subcontractors will be required to verify that the minimum has been achieved.

Contract No: PSC 2022/018

The Service Provider must confirm that the above requirements have been adhered to. The Service Provider shall be responsible for providing suitable mentorship and guidance to the Sub-Consultants and will be responsible for the quality of work produced.

Proof of payment to Sub-Consultants will be required to verify that the minimum CPG target has been achieved. For each payment invoice submitted by the Service Provider, the Targeted Enterprise(s) hours and costs per function must be clearly outlined (where applicable) to enable CPG targets to be efficiently monitored.

The penalty for not achieving the specified CPG will be 0.5% of the contract value (excluding PC Sum items and Fixed Cost allowances) for every 1% of CPG not achieved.

C1.2.3.2 RETENTION

In terms of the eThekwini Municipality Supply Chain Management (SCM) Policy (04/06/2020), Clause (21)(2), 10% retention shall be applied to this contract. There shall be no limit on retention. 50% of the accumulated retention amount shall be released on completion of all commitments contained under Stage 6, and the remaining 50% shall be paid upon issue of the Final Approval Certificate.

C1.2.3.3 PERFORMANCE MONITORING OF SERVICE PROVIDERS

[For contract awards over R10m] The Contractor shall be subjected to "Performance Monitoring" assessments in terms of the applicable Section (S.53) of the Employer's Supply Chain Management Policy.

Key Performance Indicators (KPIs) are specified in the C3: Scope of Works, or will be discussed and agreed with the Contractor before commencement of the contract.

C2.1: PRICING ASSUMPTIONS / INSTRUCTIONS

C2.1.1 GENERAL

The professional duties to be performed in terms of this contract will be as defined in the latest version of the Engineering Council of South Africa: Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act.

The Service Provider is required to provide all the services necessary to undertake the project requirements in accordance with the Scope of Work. This shall include all items necessary and incidental to providing the Services, including appointment, management and payment of Sub-Consultants. Tenderers shall price the BILL on the assumption that the conditions of contract applicable to the construction contract will be the latest General Conditions of Contract for Construction Works.

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents (refer to F.1.2 of the Tender Data).

C2.1.2 PRICING INSTRUCTIONS AND DESCRIPTION OF ITEMS IN THE SCHEDULE

Measurement and payment shall be in accordance with the relevant provisions of Clause 8 of each of the Standard Engineering Specifications referred to in the Scope of Work. The Preliminary and General items shall be measured in accordance with the provisions of C2.1.8.

The descriptions of the items in the Bill of Quantities are for identification purposes only and comply generally with those in the Standard Engineering Specification.

Clause 8 of each Standard Engineering Specification, read together with the relevant clauses of the Scope of the works, set out what ancillary or associated work and activities are included in the rates for the operations specified. Should any requirements of the

measurement and payment clause of the applicable Standard Engineering Specification, or the Scope of the works, conflict with the Bill of Quantities, the requirements of the Standard Engineering Specification or Scope of the work, as applicable, shall prevail.

Contract No: PSC 2022/018

C2.1.3 OUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Bill of Quantities are estimates only, and subject to re-measuring during the execution of the work. The Contractor shall obtain the Employer's Agent's detailed instructions for all work before ordering any materials or executing work or making arrangements for it.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities and in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

C2.1.5 MONTHLY PAYMENTS

Unless otherwise specified in the Specifications and Project Specifications, progress payments in Interim Certificates, referred to in Clause 6.10.1 of the General Conditions of Contract, in respect of "sum" items in the Bill of Quantities shall be by means of interim progress instalments assessed by the Employer's Agent and based on the measure in which the work actually carried out relates to the extent of the work to be done by the Contractor.

C2.1.4 PROVISIONAL SUMS / PRIME COST SUMS

Where Provisional Sums or Prime Cost sums (PC Sum) are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract. The Employer reserves the right, during the

execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Any unauthorized changes made by the Tenderer to provisional items in the schedule, or to the provisional percentages and sums in the Summary of the Bill of Quantities, will be treated as arithmetical errors

C2.1.6 PRICING OF THE BILL OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required (Rate Only), or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

All rates and amounts quoted in the Bill of Quantities shall be in Rands and Cents and shall include all levies and taxes (other than VAT). VAT will be added in the Summary of the Bill of Quantities.

C2.1.6.1 Part 1: Basic Fee - Normal Services

The basic fee for normal services shall be a tendered percentage of the estimated construction cost of the works as defined in the latest version of the Engineering Council of South Africa: Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act.

To ensure the required level of professionalism and quality is achieved under the contract, the minimum professional fee that may be tendered is 10%. The percentage tendered shall be deemed suited to the project category. Should the tenderer elect to tender a lower percentage, this will be allowed provided that it is submitted as an alternative offer only and subject to necessary motivation being provided. Notwithstanding. the Employer will be under no obligation to consider the lower offer.

Note:

- The basic fee (which shall cover all stages of the project deliverables) shall be determined taking into consideration all general and specific factors applicable to the project (in terms of Clause 4.3 of the Guidelines) as well as all documents and drawings supplied by the Employer and forming part of the enquiry document.
- Unless agreed to by the Employer, the fee percentage tendered shall remain fixed within a 20% variance of the tender construction estimate. Thereafter, the fee shall be adjusted in accordance with Clause 4.3.4 of the ECSA Guidelines for Professional Services.
- In terms of Stage 5 Contract Administration and Inspection, due allowance shall be made by the tenderer for the review and approval of all mechanical and electrical design and construction drawings and documents prepared by the Contractor. In this regard, it is assumed that the tenderer is well versed with these requirements based on previous

experience.

The fee shall also include for the following:

- All plotting, printing and copying of necessary drawings and documents up to Stage 3.
- All travelling required to and from the site of the works, during all stages of the project, by all personnel other than those responsible for construction monitoring.

C2.1.6.2 Part 2: Studies and Assessments

Provisional Sums

Provisional sums are provided in the BILL and work done under these items will be at the written direction of the Employer. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete amend any of the sums inserted in the "Amount" column of the BILL and in the Summary of the BILL unless ordered or authorized in writing by the Employer before closure of tenders. unauthorised changes made by the Tenderer to provisional items in the BILL, or to provisional percentages and sums in the Summary of the BILL, will be treated as arithmetical errors.

Note:

- The Tenderer's mark-up on provisional sums must include for all effort (including all relevant category factors) associated with the execution and completion of such work in terms of Clause 3.1, of the ECSA Guideline.
- The value of work to be completed under provisional sums shall be agreed with by the Employer before execution of any works.
- All time-based costs shall be limited to the tendered rates under Part 4: Additional Services.

C2.1.6.3 Part 3: Disbursements

The tendered rates for plotting, printing and copying drawings shall be on a cost to company basis and payment shall be based on the number of final drawings produced by the Service Provider and will be strictly limited to the following:

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Stages 1 to 3 : No payment. Tenderers to make allowance for these in the basic fee.

Stage 4 : Payment to suit number of copies required for tender purposes.

Stage 5 : 4 copies.

The Tenderer shall be responsible for the other costs of any (ad-hoc) plotting/printing/copying of drawings that he requires to complete his designs. Where applicable, authorisation shall be sought from the Employer for any colour plotting and copying of drawing sizes A1 and greater. The Tenderer shall set up a system to substantiate the number of copies and plots claimed monthly. This system shall be to the approval of the Employer.

C2.1.6.4 Part 4: Additional Services

The tenderer shall tender hourly rates for Key Staff under this section. Tendered rates to include for all expenses, overheads and profit for the personnel specified.

In pricing, all Lead Staff shall be treated as minimum Category C in terms of the ECSA Guideline for Services and the rates tendered shall be no less than **60** % of the current indicative Time-Based Fees, based on the Hourly Tariff of R 1 396,00 (excluding VAT), as provided in the latest version of the Department of Public Works and Infrastructure Consultant's Guidelines, "Rates for Reimbursable Expenses.

Items have also been allowed for timebased fees for general technical and salaried professional staff. Rates tendered for these items shall be based on a minimum of 12 cents/ R 100 of TACE for each category and shall include for all expenses, overheads and profit for the personnel specified.

Failure to comply with the above requirement may prejudice the tender submission on the basis that it poses a risk to the Employer in terms of meeting the minimum quality requirements.

Note:

- Works to be completed under this part shall be approved the Employer, in writing, prior to the Service Provider undertaking any additional duties.
- Where approval is granted, the Service Provider will be required to maintain daily records briefly describing works executed by professional personnel and time spent on the works.
- These records shall be checked by the Service Provider, for completeness and correctness, and thereafter submitted to the Employer for approval no later than the third working day of the following week.

C2.1.6.5 Part 5: Construction Monitoring

A provisional sum has been allowed for the employment of construction monitoring personnel and the tenderer's mark-up shall include for all costs involved in overseeing and managing this process, including overheads and profits.

The level of Construction Monitoring required will be determined by the Employer upon completion of detailed design.

Allowances have been made in the BILL for travelling costs for designated construction monitoring personnel involved in the project (i.e. for traveling within the eThekwini Municipality area of supply).

C2.1.6.6 Part 6: Travelling and Other Expenses

The tenderer shall tender a per kilometer rate for the use of private motor vehicles in executing the project. No other travel or subsidy costs will be reimbursed by the Employer.

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All travel kilometres shall be measured from the eThekwini area premises of the tenderer. In the case of the tenderer not having an office in the eThekwini area, then the travel kilometres shall be limited to 45km one way.

Acceptable travel logs for project-related tasks must be submitted to substantiate all claims.

The tenderer shall tender for other expenses to cater for any additional and foreseeable costs related to deliverables that the Tenderer considers to be omitted and wishes to make allowance for.

C2.1.7 "RATE ONLY" ITEMS

The Tenderer shall fill in rates for all items where the words "Rate Only" appear in the "Total" column. "Rate Only" items have been included where:

- (a) an alternative item or material is contemplated;
- (b) variations of specified components in the make-up of a pay item may be expected; and
- (c) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For "Rate Only" items no quantities are given in the "Quantity" column but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

C2.1.8 PRELIMINARY AND GENERAL

The Preliminary and General Section is provided to cover the Contractor's expenses incurred in complying with the requirements of the tender documents and consists of the following parts:

- Part AA: Preliminaries
- Part AB: General Specifications
- Part AH: Occupational Health and Safety

Fixed Charge Items: Each item should be priced separately and, subject to the Engineer certifying in terms of Clause 6.7 of the General Conditions of Contract that the work has been done, payment will be made as follows:

- (i) the total amount due when the certified value fixed charge items in this section is less than 5% of the net contract price;
- (ii) when the certified value of fixed charge items in this section is greater than 5% of the net contract price, payment will be limited to 5% of the net contract price. The remainder will be paid when the value of the work done under the contract, excluding the value of fixed charge items in this section, is greater

than 50% of the net contract price, excluding the value of fixed charge items in this section.

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Time Related Items: Any Time Related items not priced shall be deemed to be covered by the prices of other items in the section.

Payment of Time Related items in this section will be made throughout the contract period, the amount per month being the value of the item divided by the completion in months or, if specified in weeks, the equivalent number of months, in terms of Clause 5.5 of the General Conditions of Contract. The final monthly increment will only be paid upon the issue of a completion certificate.

MILESTONE PAYMENTS

Milestone payments shall be applicable to this Contract. The Service Provider and Employer shall establish and agree upon project milestones at the start of the contract. The **Service** Provider is required to meet these milestones on a monthly basis.

The Service Provider shall submit progress reports at the end of the agreed period outlining progress in relation to the agreed milestones. Progress claims shall be submitted in Microsoft excel format using the standard payment template provided by the Employer.

C2.2: BILL OF QUANTITIES

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C2.2: BILL OF QUANTITIES

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT R
1.		PART 1: BASIC FEE - NORMAL SERVICES				
1.1	PS 1.1	Percentage based fee (minimum 10%) on estimated value of works i.e. civil, building, structural, mechanical, electrical and control and instrumentation works.	%	R 140 000 000.00		
1.2		Service Provider to provide professional indemnity in an amount of R 10 000 000.00 that is specific to this contract (in line with clause 5.4.1 of the conditions of contract).	Sum	1		
				Sul	o-Total Part 1	
2.		PART 2: STUDIES AND ASSESSMENTS				
	PS 2.	PROVISIONAL SUMS				
2.1	PS 2.1	HAZOP and Risk Study.	Prov. Sum	1	-	R 400 000.00
2.2		Mark-up on item 2.1 above for all overheads, charges and profit.	%	R 400 000.00		
2.3	PS 2.2	Hazardous Area Classification Study.	Prov. Sum	1	-	R 400 000.00
2.4		Mark-up on item 2.3 above for all overheads, charges and profit.	%	R 400 000.00		
2.5	PS 2.3	Review, verify, amend (if necessary) and utilise all information provided by the Employer.	Prov. Sum	1	-	R 200 000.00
2.6		Mark-up on item 2.5 above for all overheads, charges and profit.	%	R 200 000.00		
2.7	PS 2.6	Employment of Health and Safety Agent.	Prov. Sum	1	-	R 500 000.00
2.8		Mark-up on item 2.7 above for all overheads, charges and profit.	%	R 500 000.00		

ITEM	PAYMENT	DESCRIPTION	LINIT	OHANTITY	DATE	AMOUNT
NO	REF	DESCRIPTION	UNIT	QUANTITY	RATE	R
2.9	PS 2.7	Institutional and Social Development (ISD) Consultant.	Prov. Sum	1	-	R 1 200 000.00
2.10		Mark-up on item 2.9 above for all overheads, charges and profit.	%	R 1 200 000.00		
2.11	PS 2.8	Sampling and Testing (where required by the Employer).	Prov. Sum	1	-	R 200 000.00
2.12		Mark-up on item 2.11 above for all overheads, charges, and profit.	%	R 200 000.00		
2.13	PS 2.9	Allowance for Specialist Sub- Consultant and Studies (where required by the Employer).	Prov. Sum	1	-	R 1 000 000.00
2.14		Mark-up on item 2.13 above for all overheads, charges and profit.	%	R 1 000 000.00		
				Su	b-Total Part 2	
3.		PART 3: DISBURSEMENTS				
3.1		Photocopying / Duplicating:				
3.1.1		a) Photocopies – black & white (80g/m²):				
3.1.1.1		<> A4 Size - Single Sided	No.	2000		
3.1.1.2		<> A3 Size - Single Sided	No.	300		
3.1.1.3		<> A2 Size - Single Sided	No.	80		
3.1.1.4		<> A1 Size - Single Sided	No.	80		
3.1.1.5		<> A0 Size - Single Sided	No.	100		
3.1.2		b) Photocopies – colour (80g/m²):				
3.1.2.1		<> A4 Size - Single Sided	No.	1000		
3.1.2.2		<> A3 Size - Single Sided	No.	150		
3.2		Printing / Plotting				
3.2.1		a) Paper prints - black & white (80g/m²):				
3.2.1.1		<> A4 Size	No.	2500		
3.2.1.2		<> A3 Size	No.	200		

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT R
3.2.1.3		<> A2 Size	No.	100		
3.2.1.4		<> A1 Size	No.	100		
3.2.1.5		<> A0 Size	No.	100		
3.2.2		b) White paper prints – colour (80g/m²):				
3.2.2.1		<> A4 Size	No.	300		
3.2.2.2		<> A3 Size	No.	80		
3.2.2.3		<> A2 Size	No.	60		
3.2.2.4		<> A1 Size	No.	60		
3.2.2.5		<> A0 Size	No.	60		
3.2.3		c) Plastic prints (sepia) – black & white				
3.2.3.1		<> A1 Size	No.	100		
3.2.3.2		<> A0 Size	No.	100		
				Su	b-Total Part 3	
4.		PART 4: ADDITIONAL SERVICES				
	PS 1.2	Additional duties where authorised by the Employer:				
4.1		Project Lead	hours	400		
4.2		Lead Civil Design Engineer	hours	200		
4.3		Lead Mechanical Design Engineer	hours	300		
4.4		Lead Electrical Design Engineer	hours	300		
4.5		Lead Control and Instrumentation and Design Engineer	hours	300		
4.6		Salaried professional or technical staff of TACE of up to R 250 000	hours	300		
4.7		Salaried professional or	houre	300		

4.7

hours

300

technical staff of TACE of up

to R 500 000

ITELA	DAVMENT					AMOUNIT
ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT R
4.8		Salaried professional or technical staff of TACE of over R 500 000 and up to R 1 000 000	hours	300		
4.9		Salaried professional or technical staff of TACE of over R 1 000 000 and up to R 1 500 000	hours	300		
				Sub	-Total Part 4:	
5.	PS 8.	PART 5: CONSTRUCTION MONITORING				
5.1		Allowance for construction monitoring and site staff – level and number of to be agreed with Employer.	Prov. Sum	1	-	R 3 000 000.00
5.2		Mark-up on item 5.1 above for all overheads, charges and profit.	%	R 3 000 000.00		
				Sub	-Total Part 5:	
6.		PART 6: TRAVELLING AND OTHER EXPENSES				
6.1		Travelling by means of a private motor vehicle.	km	50 000		
6.2		Allow for the following expenses which the tenderer considers having been omitted and requires to be priced separately:				
6.2.1		(a)	Sum	1		
6.2.2		(b)	Sum	1		
6.2.3		(c)	Sum	1		
6.2.4		(d)	Sum	1		

Provision of Multi-disciplinary Engineering Consulting Services for the Southern Wastewater Treatment Works: Electro-Mechanical Upgrades

ITEM NO	PAYMENT REF	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT R
				Sub	-Total Part 6:	

SUMMARY OF BILL OF QUANTITIES

TOTAL CARRIED FORWARD TO FORM OF OFFER	R
VALUE ADDED TAX (15 %)	R
SUB-TOTAL	R
PART 6: TRAVELLING AND OTHER EXPENSES	R
PART 5: CONSTRUCTION MONITORING	R
PART 4: ADDITIONAL SERVICES	R
PART 3: DISBURSEMENTS	R
PART 2: STUDIES AND ASSESSMENTS	R
PART 1: BASIC FEE - NORMAL SERVICES	R

PART C3: SCOPE OF WORK

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C3. SCOPE OF CONTRACT

C3.1 Project Background

The Southern Wastewater Treatment Works is located approximately 14km south of Durban, on the Northeastern bank of the Umlaas Canal. The site covers approximately 30.65 ha and the facility is surrounded by industrial and residential development, both of which may be potentially sensitive to activities within the site.

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The Southern Wastewater Treatment Works (SWWTWs) consists of a main incoming substation that feeds four downstream sub-stations throughout the plant. SWWTWs receives two main 11kV feeds from eThekwini Electricity known as Supply-A and Supply-B. The electrical reticulation on the plant serves to provide power to critical operations of the plant such as Travancore Drive Raw Sewage pumps, Veolia Water Solutions & Technologies South Africa main 11kV transformer and Pollution department building services. Part of Veolia water operations is to maintain and supply Mondi with treated second-class water for its daily operation.

The medium voltage electrical distribution switchgear and infrastructure at SWWTW's have become obsolete and damaged over the last thirty years. The switchgear has exceeded its life span and needs to be replaced with advance and latest technology in the electrical distribution field to ensure safe and reliable operation. The flash floods of October 2017 further damaged the switchgear. The equipment was submerged under water and therefore needs to be replaced and a new medium voltage substation be built in an area outside the flood zone.

The Low-level pump station mechanical equipment is at its end of it life cycle and needs to be replaced with new technology which encompasses energy savings and efficiency.

C3.2 Employer's Objective

The Employer's objective is to appoint a Multi-disciplinary Engineering Consultant, from the approved panel of Consultants for Water and Sanitation Unit (WS 7130), to undertake the design and construction supervision of the proposed electro-mechanical upgrades of the Southern WWTW.

C3.3 Description of Site and Access

The site of works is the existing Southern Wastewater Treatment Works, located at the end of Byfield Road, Jacobs, approximately 14km south of Durban, Kwa-Zulu Natal. Refer to the locality plan included.

The Contractor's labour (including local labour) shall enter and leave the site en masse on motorised transport. Southern Wastewater Treatment Works is classed as a factory in terms of the Occupational Health and Safety Act and the Contractor's labour is to keep within the bounds of the site during working hours.

Unless otherwise approved by the Engineer the Contractor shall use the Contractors' Site Entrance on Travancore Drive for all site access and deliveries.

C3.4 Summary of Scope of Work

The required Scope of Work to be undertaken by the Service Provider under this contract shall include, but is not limited to, the following:

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- 1) Planning and investigations.
- 2) Studies and assessments.
- 3) Attendance to project requirements for Occupational Health and Safety (including the appointment of a suitable Health and Safety Agent).
- 4) Facilitate attendance to project socio-political issues through the appointment and management of an institutional and social development (ISD) facilitator.
- 5) Client liaison and stakeholder engagement (including meetings).
- 6) Preparation of bid documents and procurement of relevant service providers.
- 7) Preparation of capitalisation forms with all relevant documentation. (pictures, serial numbers, invoices etc.)
- 8) Preparation of schedule of asset tagging of all installed equipment
- 9) Manage appointed service providers.
- 10) HAZOP and risk study.
- 11) Hazardous area classification study.
- 12) Tacheometry survey.
- 13) Additional sampling and testing (where required by the Employer).
- 14) Design of New Medium Voltage Sub station
- 15) Design of New Transformer Yard
- 16) Modifications to Low Level pump station
- 17) Detail design for the following works:

The new medium voltage ring and associated equipment for EWS which includes Veolia Water as well as Replacement of existing 4 No. 340 KW (6,6 KV) low level pumps with new pumps.

a) Design calculations:

- cable sizing; MV LV and fibre
- load calculations
- Cable lengths.
- Volt drop calculations
- Fault calculations on MV ring
- Fault Level for Motor Starters (entire Low Level MV) and investigation on whether a NER is required.
- Calculations to verify if 2.5 MVA transformer can operate two pumps (6.6KV @400KW/375 KW) and local power and lighting (local TX)
- New LV cable sizes and lengths volt drop calculation from mini subs and transformers
- Earth cable sizes LV and MV
- Selection of the open point. If no LV loads are supplied, then use the FLA of the mini subs
- Grading of protection

b) Equipment selection:

- Medium Voltage (MV) Switchgear; motor starters. Select the FLA of each.
- Protection relays; (Earth Fault, Overload, sensitive earth faults and cable differential)
- Protection relays for motor starters (Overload, Earth Fault, thermal, etc)
- Selection of Surge arrestors for MV motors

C) Preliminary drawings:

Site layout; i.e. cable routes for Medium Voltage and fibre cable. Verify the distance between MV cables and fibre/comms in the same trench and ideal depth and width. Quote the standards used

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- MV Schematics.
- Main LV Schematics.
- Bill of quantities
- Provide complete, Design, scope of work for outdoor transformer yard for the auto

d) Budget costing.

- A report to review the motor starting options (D.O.L, Soft Starters or VSD) for the 6.6kV motors with cost considerations.
- A total cost of switchgear, transformers, MV cabling which includes design, manufacture, delivery, installation, testing and commissioning
- 18) All associated process instrumentation and control.
- 19) Provision of Human Machine Interface (HMI) to view all MV distribution points including Low Level Pump Station MV in the control room.
- 20) All process and control specifications and process and instrumentation diagrams to be developed in conjunction with the Employer.
- 21) Upgrade low level pumpstation including:
- a) The validation of the hydraulic system curve for the Southern Outfall.
- b) The design of the low-level pumps with 4 No. new immersible/line shaft pumps
- c) The design, fabrication and installation of suction and discharge pipework for each low-level pump.
- d) The refurbishment or replacement of suction and delivery pipework, penstocks, valves, actuators specials and pipe support by the Contractor.
- e) The design, of a new overhead travelling crane and ancillaries.
- f) The decommissioning and removal of redundant pumps, valves, pipework, couplings and ancillary items.
- g) The design, of a temporary bypass pumping scheme while the Civil and Electro-Mechanical works are completed within the low-level pump station.
- h) The execution of tie-ins
- i) The design, of forced ventilation systems for the low-level pump station and new MV room.
- j) Protection of existing services or diversion where necessary.
- k) The design of cabling, and PLC programming in accordance with the new control philosophy.
- Design of new lightning protection to structures
- m) Supply and install new lighting for new and existing structures
- n) The design, new MV switchgear, starters, cabling, terminations, earthing, and cable trays.
- o) The design, of new Distribution Transformers
- p) The design, new LV switchgear, cabling, earthing, terminations and cable trays.
- q) The decommissioning and removal of existing transformers, MV switchgear, LV switchgear and any further redundant equipment.
- 22) Construction monitoring for all works listed in n) above.
- 23) Compliance with the latest revision of the Employer's Targeted Procurement Policy (including the appointment of a suitable Institutional and Social Development (ISD) Consultant to address community issues.
- 24) Performance monitoring of appointed Contractor (quarterly assessments).
- 25) Post installation and commissioning of plant.

<u>Note</u>: Information of design by AECOM and a construction contract was compiled. This information will be provided to the appointed consultant. The employer is therefore of the believe that it would take approximately nine months to have the construction document ready. The Employer shall reserve the right to reduce the scope of work during any stage of the project and no additional fees or costs will be payable.

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C3.5 Employer's Multi-disciplinary Representatives

The representative Branches of the Employer are as follows:

- a) Design Branch
- b) Treatment Works Operations Branch
- c) Mechanical & Electrical Branch
- d) Instrumentation, Control and Telemetry Branch

The role and responsibility of eThekwini stakeholders are listed in the table below.

Department Name	Role/Responsibility
<u>Design Branch</u>	 Assist M&E with the Co-ordination of Employer's project team Approval of scope and specifications for the civil engineering designs Assist M&E with the Approval of tender documentation Assist M&E with the Facilitating internal BID committee approvals
Treatment Works Operations Branch	 Reviewing and commenting on scope of works, designs and specifications regarding the operational aspects of the plant during all stages throughout the contract (i.e. design, tender, construction, tie-in and shutdowns, commissioning and trial operational periods) Co-ordinating and facilitating operational aspects during shutdowns, tie-ins, commissioning and trial operational periods of the plant
Mechanical and Electrical Branch (Including Instrumentation, Control and Telemetry Branch)	 Overall project management including contract administration and liaising with Service Provider Co-ordination of Employer's project team Approval of tender documentation Facilitating internal BID committee approvals Reviewing and commenting on scope of works, designs and specifications regarding the mechanical and electrical aspects of the plant during all stages throughout the contract (i.e., design, tender, construction, tie-in and shutdowns, commissioning and trial operational periods) Co-ordinating and facilitating mechanical and electrical aspects during shutdowns, tie-ins, commissioning and trial operational periods of the plant

C3.6 PROJECT SPECIFICATIONS

PS 1. DUTIES

PS 1.1 Normal Duties

The professional duties to be performed in terms of this contract will be as defined in the latest version of the Engineering Council of South Africa: Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act.

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This Guideline issued by ECSA under Section 34(2) of the Engineering Profession Act, 2000 (Act 46 of 2000) guides the determination of the services to be provided on projects and facilitates estimations of appropriate fees.

The stages/duties in the Form of Agreement applicable to this contract are listed below: -

- a) Planning and investigations.
- b) Preliminary design and reporting.
- c) Detail design and reporting.
- d) Tender drawings.
- e) Construction drawings.
- f) Preparation of bid documents and procurement of relevant service providers.
- g) Manage appointed service providers.
- h) Construction monitoring.
- i) Contract administration (including monthly payments).
- j) Dealing with claims.
- k) Quality control and reporting.
- I) Attendance to project requirements for Occupational Health and Safety.
- m) Cash flows.
- n) Progress reports.
- o) Client liaison and stakeholder engagement (including all meetings).
- p) As-built drawings.
- q) Post installation and commissioning of plant.
- r) Close-out Report.

PS 1.2 Additional Duties

The additional duties to be provided by the Service Provider under the contract are listed below:

- a) Studies and assessments.
- b) Comply with the latest revision of the Employer's Targeted Procurement Policy which shall include, but is not limited to, the following:
 - i. Incorporation of any targeted participation goals and training outcomes.
 - ii. The measuring of key performance indicators (quarterly assessments required).
 - iii. The selection, appointment and administration of participation.
 - iv. Auditing compliance with the above by any contractors and/or professional consultant.

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PS 2. PROVISIONAL SUMS

The Service Provider must ensure the following procedure is carried out when appointing Sub-Consultants under the contract:

- a) Prepare a Request for Quotation (RFQ) document, in consultation with the Employer, defining functionality requirements, scope of work and BILL.
- b) Advertise tender to the public through the Employer's Notice Board.
- c) Obtain a minimum of 3 quotations.

- d) Assess quotations and recommend the lowest, most responsive tenderer.
- e) Appoint the recommended tenderer.

The Service Provider is required to undertake the following tasks upon appointment of the Sub-Consultants:

- a) Managing the programme and performance of the Sub-Consultants.
- b) Managing and inspecting quality.
- c) Preparing and processing payment certificates.
- d) All other work identified by the Employer with respect to Sub-Consultants.

PS 2.1 HAZOP and Risk Study

The Service Provider, in conjunction with the Employer's representatives, is required to undertake a HAZOP and Risk Study on the detail design. The study will be in the form of a workshop. The Service Provider shall host the workshop and ensure that all relevant representatives are present. The HAZOP findings are to be documented in a HAZOP Report and must be signed off by all relevant Service Providers (under the contract) and the Employer's representatives.

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PS 2.2 Hazardous Area Classification Study

The Service Provider is required to undertake a Hazardous Area Classification Study at Southern WWTW. The study must include the Low-Level Pump station.

PS 2.3 Review, Verify, amend (if necessary) and Utilise All Information Provided by the Employer

The Service Provider is required to review, verify, amend (if necessary) and utilise all information provided by the Employer as listed under PS 4. The information provided shall inform the detail design.

PS 2.4 Tacheometry Survey

Where required, The Service Provider is required to appoint a suitably qualified Surveyor to complete a detail site survey of the existing plant with regards to the scope of works.

PS 2.5 Employment of Health and Safety Agent

The Service Provider may be required to appoint a suitably qualified Health and Safety Agent who shall be engaged from detail design stage. The appointed Health and Safety Agent will be required to work closely with the Employer's Health and Safety representatives for compliance and reporting purposes.

PS 2.6 Institutional and Social Development (ISD) Consultant

The Service Provider is required to appoint a suitably qualified ISD Consultant prior to construction. The responsibilities of the ISD Consultant shall include, but is not limited to the following:

- a) Engage with the Ward Councilor, Business Forums and relevant stakeholders prior to construction.
- b) Facilitate the establishment of a Project Steering Committee and facilitate monthly meetings.
- c) Resolve community issues.
- d) Facilitate communication between the appointed Contractor and Sub-Contractors.
- e) Attend community meetings (which may take place after business hours).

PS 2.7 Sampling and Testing (where required by the Employer)

Where required, The Service Provider may be required to undertake sampling and testing that may be deemed necessary for detail design.

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PS 2.8 Specialist Sub-Consultant and Studies (where required by the Employer)

Where required, The Service Provider may be required to appoint a Specialist Sub-Consultant to undertake studies that may be deemed necessary by the Employer.

PS 3. TENDER DOCUMENT AND PROCUREMENT FOR CONSTRUCTION

The Service Provider must ensure the following procedure is carried out when appointing a Contractor to complete construction works:

- a) Prepare the procurement document (using the Employer's latest template), in consultation with the Employer, defining functionality requirements, scope of work, standard specifications, bill of quantities and project specifications.
- b) Prepare a separate book of drawings.
- c) Prepare a Bid Specification Report for submission to the Employer's Bid committee.
- d) Hold a compulsory clarification meeting.
- e) Address all tender and technical enquiries.
- f) Adjudicate tenders and recommend the lowest, most responsive tenderer.
- g) Prepare a Bid Evaluation Report for submission to the Employer's Bid Committee.
- h) Address any queries in the case of an appeal.

The Service Provider shall be provided with the latest version of the Employer's procurement template, Bid reports and any other relevant Bid templates.

PS 4. INFORMATION TO BE PROVIDED BY THE EMPLOYER

PS 4.1 Existing Services

The site contains numerous existing services such as water mains, sewerage pipes, stormwater pipes and channels and electricity cables. The Employer shall provide the Service Provider with pdf soft copies of all available As-Built Drawings for the plant.

The positions of all services should be confirmed with the Employers Agent's Representative and the Service Provider shall ensure that the positions of all existing services are taken into consideration during detail design stage.

PS 5. INFORMATION PROVIDED ON SOUTHERN WWTW

PS 5.1 Operation of Southern WWTW

The plant is access controlled and has full-time security on site. The plant operates continuously for 24 hours a day and is manned for 24 hours a day and is manned by a 3 shift system, 06h00 to 14h00,14h00 to 21h00, 21h00 to 06h00

The plant personnel comprise 32 full-time staff i.e., 14 females and 18males and 5 contract cleaning services staff. (3male and 2 female).

PS 5.2 Protocol to be Followed at Southern WWTW

The Service Provider shall co-operate fully with the Employer's Site Personnel for the duration of the contract. The Service Provider shall ensure the following:

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- a) The Employer's rules and requirements for plant operations are adhered to.
- b) The Service Provider's Site Personnel are familiar with and comply with the Employer's emergency procedures.
- c) Activities performed by the Service Provider's Site Personnel do not adversely affect the health and safety of the Employer's Personnel.

PS 6. DETAIL DESIGN

PS 6.1 General

The Service Provider is required to complete a detail design of all engineering aspects i.e. civil, building, structural, hydraulics, mechanical, electrical, control and instrumentation for the components of works outlined under items PS 6.2 – PS 6.7 below. All engineering designs completed by the Service Provider shall conform to and accommodate the following:

- a) Information provided by the Employer.
- b) The Employer's requirements and specifications.
- c) Legislative requirements.
- d) Environmental aspects and restrictions.
- e) Critical design and planning criteria.
- f) Process continuity to be maintained throughout the upgrade.
- g) Reliability and power consumption.
- h) Maintenance requirements.
- i) Health and safety requirements.
- j) Existing infrastructure, services, and equipment.
- k) Best current engineering practice.
- I) Training and Maintenance

PS 6.2 New Main Medium Voltage Intake Substation (Civil)

A New Main Medium Voltage Intake Substation is required to be constructed on higher ground due the position of the existing substation has caused it to flood out during heavy rains which causes disruptions to the electricity supply.

The detail design of the New Main Medium Voltage Intake Substation shall include, but is not limited to, the following:

- a) A New Main Medium Voltage Intake Substation as per the designs provided
- b) Relevant signage.

PS 6.3 New Main Medium Voltage Intake Substation (Electrical)

The detail design, of all new equipment for the new substation building, including all ancillary equipment medium voltage, low voltage, fibre cabling and connections

PS 6.4 New Medium Voltage Mini Substation (Electrical)

The detail design, of all new mini substation to replace the existing substation buildings including all

ancillary equipment medium voltage, low voltage, fibre cabling and connections. This also includes the refurbishment of the existing substations and making safe of the installation

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PS 6.5 Low Level Pump Station (Medium and Low Voltage)

PS 6.5.1 Medium and Low Voltage Switchgear

The detail design, of all new Medium Voltage Switchgear, Medium Voltage Motor Starters Transformers and transformer outdoor yards including all ancillary equipment medium voltage, low voltage, fibre cabling and connections.

PS 6.5.2 Medium Voltage Motor Starters

The detail design, of all new Medium Voltage Motor Starters including all ancillary equipment, medium voltage, low voltage, fibre cabling and connections.

PS 6.5.3 Low Voltage Motor Control Centre

The detail design, of all new Low Voltage Motor Control Centre including all ancillary equipment, low voltage, fibre cabling and connections.

PS 6.5.4 Medium Voltage Pumps

The detail design, of all new pump sets and sump pumps including all ancillary equipment, piping, valves and connections. This includes the validation of the system curve.

PS 6.5.5 Travelling Crane

The detail design, of a new travelling crane including all ancillary equipment and connections.

PS 6.5.6 Refurbishment of the Low-Level Pump Station

It is recommended that the entire Low Level pump station be refurbished as per the proposed employer's design

PS 6.7 Instrumentation and Control

The Service Provider shall ensure the following:

PS 6.7.1 General

- a) Provision of Human Machine Interface (HMI) to view all plant controls and instrumentation in the control room.
- b) All automated process units to be programmable via a SCADA system and accessed from a control room.
- c) All process and control specifications and process and instrumentation diagrams shall be developed in conjunction with the Employer.

PS 7. DRAWINGS

PS 7.1 Design Drawings (Tender and Construction)

The Service Provider is required to provide engineering design drawings (to-scale) for tender and construction purposes. All design drawings shall comply with the Employer's requirements prior to submission for approval. The Service Provider shall ensure the following:

a) Tender drawings to be submitted in hard copy – A1 copy for approval by the Employer and A2 book of drawings for tender purposes. The number of A2 book of drawings shall be determined and agreed upon by the Employer and Service Provider at tender stage.

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- b) Approved construction drawings to be submitted in soft copy (dxf/dwg format) and hard copy (A0) to the Employer (one copy).
- c) Approved construction drawings to be submitted in hard copy (A0) to the appointed Contractor (three copies).

PS 7.2 As-Built Drawings

The Service Provider is required to provide as-built drawings (to-scale) on completion of construction works. All as-built drawings shall comply with the Employer's requirements prior to submission for approval.

The Service Provider shall submit drawings in soft copy (dxf/dwg format) and hard copy (A0 sheets) to the Employer for their permanent record. The as-built drawings shall include all new and existing infrastructure and services and must clearly demarcate those to be abandoned/demolished (if applicable).

The Service Provider is required to reproduce existing as-built drawings for the works which are currently only available in PDF format.

PS 8. CONSTRUCTION MONITORING

The required level of monitoring and site staff requirements shall be confirmed upon completion of detail design.

PS 9. REPORTING AND PROGRESS

The Service Provider is required to submit both hard and soft copies of all reports under the contract.

PS 9.1 Preliminary Design Report

The Service Provider is required to review, verify and amend all technical reports previously completed by the Professional Consultant (as outlined under PS 4.1 above) and prepare and submit a Preliminary Design Report for the proposed works. The report shall include, but is not limited to, the following:

- a) Cost estimates.
- b) Overview of scope of works.
- c) Preliminary design.
- d) Outcomes of relevant studies, investigations, and assessments.
- e) Outcome of environmental applications.

PS 9.2 Detail Design Report

The Service Provider is required to prepare and submit a Detail Design Report including, but not limited to, the following:

- a) Detail scope of work.
- b) Technical approach and methodology.
- c) Design calculations.
- d) Assumptions.
- e) Project specifications.
- f) Findings from the HAZOP and Risk Study.
- g) Findings from the Hazardous Area Classification Study
- h) Terms of reference.

The minimum requirements for the detail design drawings, to be included with the report submission, are outlined below for each engineering discipline.

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Engineering Discipline	Minimum Requirements
Process Engineering	 Process and control description Process flow diagram P&ID drawings
Civil Engineering	 General site layout Overall site layout of existing and proposed structures, services and access routes Detail layout of all structures, pipelines and road works
Electrical Engineering	 Load Schedule Backup power control philosophy Electrical equipment data sheets and motor list Lighting and emergency lighting detail Cable schedule Overall site layout of MCC, generator and power, fibre cable routing MCC Design Drawings MV Switchgear Design Drawings Transformer Design Drawings Low Level Pump Station Grading of Protection (MV) Works Single Line Diagrams SPL DB layout drawings Earthing drawings
Mechanical Engineering	 Mechanical equipment and operational philosophy description and data sheets Mechanical layout and detailed drawings Mechanical piping drawings-general layout and pipe/valve schedules Pump and Pipe modelling diagrams Validation of system curve
Control and Instrumentation Engineering	 Process and control philosophy narrative Instrumentation data sheets and Instrumentation index Instrumentation junction box positioning Junction box and PLC cabinet GA details Hookup drawings Instrumentation and cable routing drawings

PS 9.3 Progress Reports and Programme

The Service Provider is required to submit written progress reports to the Employer prior to progress meetings. The reports shall highlight programmed activities and indicate the status.

The Service Provider shall be responsible for planning the sequence of their work and ensuring that the following constraints are accommodated:

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- All legislated timeframes.
- Employer's Supply Chain Management timeframes.
- Employer's requirements.
- Approval periods by the Employer.
- Timeframes for studies or assessments to be completed by Sub-Consultants.
- Allowable periods for shutdowns (limited to an 8-hour period). At minimum, the required notice period is one week prior to the scheduled shutdown.

The Service Provider's programme shall outline the following:

- Various activities related to a time scale, for each element of the work, including those of Nominated and/or Sub-Consultants, in sufficient detail to be able to assess progress.
- Critical path activities and their dependencies.
- Key dates in respect of work to be carried out by others.
- Key dates in respect of information to be provided by the Employer and/or others.

The Service Provider's programme and methodology will not be accepted as the basis for claims for additional compensation without due reference to all relevant associated factors.

Should progress lag by more than 4 weeks then the Service Provider shall submit a revised programme and method statement on how he proposes to accelerate the works.

If in the opinion of the Employer, such revised programme will not make up the lost time, the Employer's Agent shall have the right to request the Service Provider to reorganize his work in a manner which will ensure an acceptable programme. Claims for additional payment to meet any costs incurred due to such reorganisation will not be accepted.

PS 9.4 Close-out Report

The Service Provider is required to submit a project close-out report on completion of construction. The report shall include, but is not limited to, the following:

- a) Actual costs.
- b) New infrastructure.
- c) Demolished/abandoned infrastructure.
- d) Authorisations and approvals obtained.
- e) Procurement information.
- f) Challenges incurred.
- g) Deviation from original scope of work.
- h) Any operational and maintenance requirements.
- i) Completion dates.
- i) Defects liability period.

PS 10. LIAISON AND COMMUNICATION

PS 10.1 Stakeholder Engagement

The Service Provider is required to facilitate communication between the Employer and all relevant stakeholders including, but not limited to, Sub-Consultants, public authorities, government departments and other relevant stakeholders throughout the period of performance.

PS 10.2 Meetings

The Service Provider is required to attend all meetings listed below and shall ensure representation by the Project Lead and relevant key personnel:

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- a) Project handover meeting.
- b) Site Inspection.
- c) Monthly technical and progress meetings (from the contract start date).
- d) Design review meetings (a minimum of two meetings per discipline).
- e) Tender document review meetings (a minimum of four meetings).
- f) Construction drawing review meetings.
- g) Ad hoc technical meetings as required by the Employer (to be agreed by the Employer and Service Provider).
- h) Tender clarification meeting.
- i) Construction handover meeting.
- j) Monthly site meetings during construction phase.
- k) Close-out meeting.

Meetings shall be physical or virtual. The Service Provider shall record and issue minutes (in hard and soft copies) for all meetings no later than 2 weeks after the meeting.

PS 11. POST INSTALLATION AND COMMISSIONING RESPONSIBILITIES

During the post installation testing and commissioning phase of the project, the service provider shall be expected to fulfill all critical roles and responsibilities indicated but not limited to the following:

- a) Review and approve the Contractor's commissioning plan and quality control documentation.
- b) Vet the experience of the Contractor's commissioning team.
- c) Facilitate commissioning meetings with the Contractor and Employer as per the Contractor's commissioning plan.
- d) Witness and approve factory and on-site acceptance testing of all electrical switchgear, motor control centres including associated control systems including all mechanical equipment (pumps, valves overhead cranes etc)
- e) Perform all pre-commissioning checks with the Contractor and witness and approve precommissioning performance and verification activities undertaken by the Contractor.
- f) Witness wet commissioning performance and verification activities undertaken by the Contractor and the safe operation of plant and equipment in compliance with the requirements of the specification.
- g) Track deficiencies recorded during commissioning and ensure that corrective measures are followed through by the Contractor.
- h) Review and sign off the Contractor's commissioning documentation (record sheets, test forms, etc.) for mechanical and electrical plant and equipment.

 Together with the Contractor, review and check the process control network including control and instrumentation system settings during commissioning in compliance with the relevant drawings and specifications.

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- j) Witness and approve process commissioning and process performance testing undertaken by the Contractor and representatives of the Employer.
- k) Together with the Contractor, monitor all alarms during performance verification.
- I) Review and comment on the Contractor's minutes of commissioning meetings.
- m) Review and approve the Contractor's operations and maintenance manuals for completeness.
- n) Review and where required, sign off all as-built drawings supplied by the Contractor.
- Review and comment on the Contractor's training programme and where necessary, witness all training afforded to the Employer's personnel to ensure that the full requirements have been fulfilled and objectives met.
- p) Due allowance for the above shall be made in the tendered rates based on the Service Provider's previous experience on similar projects.

PS 12. DESIGN RESPONSIBILITY AND GUARANTEE

The Service Provider will be required to undertake all necessary testing together with the Contractor to confirm that the process objectives have been satisfied and report to the Employer. To this end, the Service Provider must ensure that all relevant civil, hydraulic, electro-mechanical and process designs completed, and equipment specified will be able to fulfil these objectives as well as confirm during construction that all process plant and equipment supplied by the Contractor is to specification, in all respects, and able to meet the minimum performance criteria.

Should any non-conformance issues be identified during the commissioning phase, then the Service Provider shall be responsible for undertaking all necessary investigations together with the Contractor to clearly identify the areas of non-conformance and to effect all necessary interventions required to satisfy the objectives, failing which the Service Provider shall then be held liable for the cost of any additional effort (including construction), where such non-conformance is as a result of work contained within the scope of the Service Provider. This guarantee shall be covered by the Service Provider's professional indemnity under BILL item 1.2.

PART C4: ANNEXURES

Annexure C4.1	Standard Conditions of Tender – CIDB SFU (2015)
Annexure C4.2	CIDB Standard Professional Services Contract (July 2009)
Annexure C4.3	Locality Plan
Annexure C4.4	Policy for Performance Monitoring of Service Providers (November 2009)
Annexure C4.5	37.2 Agreement in terms of Occupational Health and Safety Act No. 85 of 1993
Annexure C4.6	Approved Panel Lists WS 7130