



**CLUSTER**  
**Trading Services**

**UNIT**  
**Water and Sanitation**

**DEPARTMENT**  
**Sanitation Operations**

**PROCUREMENT DOCUMENT**  
**PROFESSIONAL SERVICES**

Documents are to be obtained, free of charge, in electronic format, from the [National Treasury's eTenders website](#) or the [eThekweni Municipality's website](#).

**Contract No:** **WS 7637**

**Contract Title:** **The Provision of Professional Multi-disciplinary Engineering Consulting Services for the development of the Investment Strategy of Wastewater Treatment Works, as and when require, for a period of 24 months**

**CLARIFICATION MEETING AND QUERIES**

**Clarification Meeting:** **Compulsory Clarification Meeting**

**Meeting Location, Date, Time:** **Wastewater Management Building (17 Electron Road - Springfield) and thereafter 13 Wastewater Treatment Works – over 5 days  
From: 19 to 23 June 2023 at 09H00**

**Queries can be addressed to:** **Lusapho Tshangela**  
**The Employer's Agent's:** **Tel: 031 311 2671**  
**Representative:** **eMail: [Lusapho.tshangela@durban.gov.za](mailto:Lusapho.tshangela@durban.gov.za)  
email queries to be submitted by 06 July 2023 and consolidated question and answers will be uploaded 13 July 2023**

**TENDER SUBMISSION**

**Delivery Location:** **The Tender Box in the foyer of the Municipal Building  
166 KE Masinga Road, Durban**

**Closing Date/ Time:** **Friday, 21 July 2023 at 11h00**

**FACSIMILE, eMAIL, or POSTED TENDERS WILL NOT BE ACCEPTED**

**Issued by:**

**ETHEKWINI MUNICIPALITY**

**Deputy Head:** **Sanitation Operations**

**Date of Issue:** **15/06/2023**

Document Version : 14/03/2023

**FOR OFFICIAL USE ONLY**

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

## INDEX to PROCUREMENT DOCUMENT

<b>TENDER PART</b>	<b>Part T1</b>	<b>TENDERING PROCEDURES</b>		<b>Page</b>
		<b>T1.1</b>	<b>Tender Notice and Invitation to Tender</b>	
		T1.1.1	Tender Notice and Invitation to Tender .....	<b>2</b>
		<b>T1.2</b>	<b>Tender Data</b>	
		T1.2.1	Standard Conditions of Tender .....	<b>4</b>
		T1.2.2	Tender Data ( <i>applicable to this tender</i> ) .....	<b>4</b>
		T1.2.3	Additional Conditions of Tender .....	<b>13</b>
	<b>Part T2</b>	<b>RETURNABLE DOCUMENTS</b>		<b>Page</b>
		<b>T2.1</b>	<b>List of Returnable Documents .....</b>	<b>14</b>
		<b>T2.2</b>	<b>Returnable Schedules, Forms and Certificates .....</b>	<b>15</b>

<b>CONTRACT PART</b>	<b>Part C1</b>	<b>AGREEMENT AND CONTRACT DATA</b>		<b>Page</b>
		<b>C1.1</b>	<b>Form of Offer and Acceptance</b>	
		C1.1.1	Offer .....	<b>71</b>
		C1.1.2	Acceptance .....	<b>72</b>
		C1.1.3	Schedule of Deviations .....	<b>73</b>
		<b>C1.2</b>	<b>Contract Data</b>	
		C1.2.1	Standard Conditions of Contract .....	<b>74</b>
		C1.2.2	Contract Data .....	<b>74</b>
		C1.2.3	Additional Conditions of Contract .....	<b>77</b>
	<b>Part C2</b>	<b>PRICING DATA</b>		<b>Page</b>
		<b>C2.1</b>	<b>Pricing Assumptions / Instructions .....</b>	<b>79</b>
		<b>C2.2</b>	<b>Pricing Schedule (separate page numbering system) .....</b>	<b>80</b>
	<b>Part C3</b>	<b>SCOPE OF WORK</b>		<b>Page</b>
		<b>C3.1</b>	<b>Background .....</b>	<b>178</b>
		<b>C3.2</b>	<b>Employer's Requirements .....</b>	<b>178</b>
		<b>C3.3</b>	<b>Annexures .....</b>	<b>187</b>
		C3.3.1	Standard Conditions of Tender .....	<b>188</b>
		C3.3.2	Standard Professional Services Contract .....	<b>189</b>

## **PART T1: TENDERING PROCEDURES**

### **T1.1.1: TENDER NOTICE AND INVITATION TO TENDER**

Tenders are hereby invited for Professional Services to provide professional multi-disciplinary engineering consulting services for the development of the investment strategy of 27 wastewater treatment works for the Sanitation Operation. The 27 wastewater treatment works which require the development of an investment strategy are Wastewater Treatment Works: Tongaat, Hammarsdale, Genazzano, Kwandengezi, Umdloti, Hillcrest, Verulam, Glenwood, Umhlanga, Fredville, Phoenix, Dassenhoek, Kwamashu, Cato Ridge, Northern, Mpumalanga, New Germany, Amanzimtoti, Umbilo, Kingsburgh, Umhlatuzana, Craigieburn, Central, Magabeni, Southern, Umkomaas and Isipingo. The professional services required will be as and when require over a period of 24 months

The site visit will entail a visit to the following 13 Wastewater Treatment Works: Central, Umhlanga, Fredville, Mpumalanga, New Germany, Umbilo, Umhlatuzana, Genazanno, Verulam, Kingsburgh, Craigieburn, Magabeni and Umkomaas.

<b>Subject</b>	<b>Description</b>	<b>Tender Data Ref.</b>
<b>Employer</b>	The Employer is the eThekweni Municipality as represented by: Deputy Head: <b>Sanitation Operations</b>	F.1.1.1
<b>Tender Documents</b>	Documents can only be obtained in electronic format, issued by the eThekweni Municipality. Documentation can be downloaded from the <b>National Treasury's eTenders website</b> or the <b>eThekweni Municipality's Website</b> . The <u>entire document</u> should be printed (on A4 paper) and suitably bound by the tenderer.	F.1.2
<b>Clarification Meeting</b>	<b>Wastewater Management Building (17 Electron Road - Springfield) and thereafter 13 Wastewater Treatment Works – over 5 days</b> <b>From: 19 to 23 June 2023 at 09H00</b>	F.2.7
<b>Seek Clarification</b>	Queries relating to these documents are to be addressed to the Employer's Agent's Representative whose contact details are: <b>Lusapho Tshangela</b> <b>Tel: 031 311 2671</b> <b>eMail: Lusapho.tshangela@durban.gov.za</b> <b>email queries to be submitted by 06 July 2023 and consolidated question and answers will be uploaded 13 July 2023</b>	F.2.8
<b>Submitting a Tender Offer</b>	Tender offers shall be delivered to: <b>The Tender Box in the foyer of the Municipal Building</b> <b>166 KE Masinga Road, Durban</b>	F.2.13
<b>Closing Time</b>	Tender offers shall be delivered on or before <b>Friday, 21 July 2023</b> at or before <b>11h00</b> .	F.2.15
<b>Evaluation of Tender Offers</b>	<b>The 80/20</b> 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 <b>Specific Goal(S)</b> 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.

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 eThekweni Municipality as represented by: Deputy Head: **Sanitation Operations**

**F.1.2 Tender documents:** The Tender Documents issued by the Employer comprise:

- 1) This procurement document.
- 2) The “Standard Professional Services Contract – 3<sup>rd</sup> Edition July 2009” published by the Construction Industry Development Board (CIDB). This document is obtainable separately, and Tenderers shall obtain their own copies.
- 3) 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 Standard for Uniformity in Construction Procurement (July 2015).
  - Any other eThekweni Policy documents referenced in the Tender Documents.

Electronically downloaded documentation is obtainable from the National Treasury’s **eTenders Website** or the **eThekweni 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.

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

**Lusapho Tshangela**

**Tel: 031 311 2671**

**eMail: [Lusapho.tshangela@durban.gov.za](mailto:Lusapho.tshangela@durban.gov.za)**

**email queries to be submitted by 06 July 2023 and consolidated question and answers will be uploaded 13 July 2023**

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 submitting the tender is under restrictions or has principles who are under restriction to participate in the Employer's procurement due to corrupt or fraudulent practices.
- (b) the Tenderer does not have the legal capacity to enter into the contract.
- (c) the Tenderer does not comply with the legal requirements as stated in the Employer's current SCM Policy.
- (d) 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.
- (e) 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.
- (f) in the case of JV submissions, two or more JV entities have common directors / shareholders or common entities tendering for the same works.
- (g) 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.
- (h) 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.

SCM Policy (Cl.14(4)) requires suppliers/ service providers/ contractors to be registered on the **eThekweni Municipality Central Supplier Database**.

In the event of the Tenderer not being registered on the eThekweni Municipality's Central Supplier Database, the tenderer must register on the internet at [www.durban.gov.za](http://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 regarding registration on the **eThekwini Municipality Central Supplier Database**:

- (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 Eligibility: Tenderer's Experience

Only those tenderers that can demonstrate experience, by the submission of the specified returnable document in T2.2 (duplicated for each experience submission), and supply the associated documentation/ information, in works of a similar nature, within the number of years stipulated below, will be eligible to have their tenders evaluated in terms of Clause F.3.11.

**Returnable form T2.2.13: "Eligibility: Experience of Tenderer" is to be duplicated for each experience submission, as may be required.**

Contact details of the Client is required to be provided on the above-mentioned form. The contact details may be used by the Employer to verify the information, pertaining to the experience submission, as provided by the Tenderer. Should the Employer's reasonable attempts to make contact with the Client, to verify the information provided, fail (for whatever reason), that specific experience submission will be considered invalid.

In the event of a Joint Venture (JV) tendering for this contract, experience gained by the separate entities making up the JV may be used as experience provided that the experience requirement, as stipulated in **Table 1**, is satisfied, and that the required documentation/ information is provided.

**Table 1: Tenderer's Experience Requirement**

<b>Repairs, Refurbishment and Replacement of Sewer Network Infrastructure</b>
<ul style="list-style-type: none"><li>• Has successfully completed a minimum of 2 Treatment Works Conditional/Functionality Assessment projects within the past 15 years.</li><li>• Has successfully completed a minimum of 1 Municipal Treatment Works Conditional/Functionality Assessment projects within the past 10 years.</li><li>• Has successfully completed a minimum of 5 Infrastructure Conditional/Functionality Assessment projects within the past 10 years.</li><li>• Has undertaken a wastewater microbial agent study. The wastewater microbial agent study must have been for one of the following: Parasite eggs, Listeria, Helmith, Protozoa, Escherichi coli, Faecal strotococci or Coliforms</li></ul>

Tenderers are to submit **one** of the following, in verification for each experience claimed:

- Copies of signed completion certificates for all projects;  
or,
- Written correspondence from previous Client on the Tenderers participation and contract details, per claimed project;  
or,
- Copies of final certificates for all projects, per claimed project

**Note:** The failure to complete the relevant returnable form T2.2.13 for each submission of experience AND supply the associated, relevant, documentation (as specified on Table 1) will invalidate the experience submission.

#### F.2.1.4 Eligibility: Tenderer Key Staff

Tenderers are to demonstrate Key Staff experience which meet the minimum criteria set out below, by the submission of the specified returnable document in T2.2 (duplicated for each experience submission) and supply the associated documentation/ information.

- a. Project Manager
  - i. Have an active professional registration as a Project Manager with Project Management South Africa (PMSA) or The South African Council for the Project and Construction Management Professions (SACPCMP)
  - ii. Have a minimum of 15 years contract management experience, whereby, within the 15 year contract management experience there must be a minimum of five years experience with any one of the following engineering disciplines, which are: Civil, Chemical, Mechanical, Electrical and Instrumentation. The 5 year experience (engineering discipline experience) will be inclusive of the overall 15 year contract management experience
- b. Civil Engineer
  - i. Have a tertiary qualification in civil engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 10 years' civil engineering experience post professional registration
- c. Chemical Engineer
  - i. Have a tertiary qualification in chemical engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 10 years' chemical engineering experience post professional registration
- d. Mechanical Engineer
  - i. Have a tertiary qualification in mechanical engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 10 years' mechanical engineering experience post professional registration
- e. Electrical Engineer
  - i. Have a tertiary qualification in electrical engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 10 years' electrical engineering experience post professional registration
- f. Instrumentation Engineer
  - i. Have a tertiary qualification in instrumentation engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 10 years' instrumentation engineering experience post professional registration



- g. Civil Technician
  - i. Have a tertiary qualification in civil engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Techni Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 5 years' civil engineering experience post professional registration
- h. Chemical Technician
  - i. Have a tertiary qualification in chemical engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Techni Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 5 years' chemical engineering experience post professional registration
- i. Mechanical Technician
  - i. Have a tertiary qualification in mechanical engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Techni Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 5 years' mechanical engineering experience post professional registration
- j. Electrical Technician
  - i. Have a tertiary qualification in electrical engineering
  - ii. Have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Techni Eng.) with Engineering Council of South Africa (ECSA)
  - iii. Have a minimum of 5 years' electrical engineering experience post professional registration
- k. Quantity Surveyor
  - i. Have a tertiary qualification in quantity surveying
  - ii. Have an active professional registration as a Professional Quantity Surveyor (Pr. QS.) with The SA Council for the Quantity Surveying Profession (SACQSP)
  - iii. Have a minimum of 10 years' quantity surveying experience post professional registration

**Note:** The failure to complete the relevant returnable form in T2.2 for each submission of Key Staff experience AND supply the associated, relevant, documentation (as specified in T2.2.14) will invalidate the experience submission.

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

"Documents are to be obtained, free of charge, in electronic format, from the **National Treasury's eTenders website** or the **eThekweni 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 websites specified in F.1.2. 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:**

**Wastewater Management Building (17 Electron Road - Springfield) and thereafter 13 Wastewater Treatment Works – over 5 days**  
**From: 19 to 23 June 2023 at 09H00**

The arrangements for a compulsory clarification meeting are:

Day	Place	Date	Time
One	Wastewater Management Building (17 Electron Road) Thereafter proceed to the 3 Wastewater Treatment Works (Umhlanga, Genazanno and Verulam)	10 <sup>th</sup> May 2023	09H00
Two	Wastewater Management Building (17 Electron Road) Thereafter proceed to the 3 Wastewater Treatment Works (Craigieburn, Magabeni and Umkomaas)	11 <sup>th</sup> May 2023	09H00
Three	Wastewater Management Building (17 Electron Road) Thereafter proceed to the 3 Wastewater Treatment Works (Umbilo, Umhlatuzana and Kingsburgh)	12 <sup>th</sup> May 2023	09H00
Four	Wastewater Management Building (17 Electron Road) Thereafter proceed to the 3 Wastewater Treatment Works (Central and Fredville)	15 <sup>th</sup> May 2023	09H00
Five	Wastewater Management Building (17 Electron Road) Thereafter proceed to the 3 Wastewater Treatment Works (Mpumalanga and New Germany)	16 <sup>th</sup> May 2023	09H00

The co-ordinates for the previous page mentioned Sanitation Operation wastewater treatment works sites are detailed within the table below:

No	Facility	X_coord	Y_coord
1	Central	31,05670043550	-29,88061281760
2	Craigieburn	30,75200976870	-30,20806198160
3	Fredville	30,66842614180	-29,69386906890
4	Genazzano	31,15712175560	-29,60809640210
5	Kingsburgh	30,85653897500	-30,07570679300
6	Magabeni	30,78214705440	-30,16742879980
7	Mpumalanga	30,59164834760	-29,80347682240
8	New Germany	30,89589881170	-29,80590177590
9	Umbilo	30,88902894280	-29,84461971810
10	Umhlatuzana	30,88397414550	-29,87911261810
11	Umkomaas	30,79328058130	-30,20307459070
12	Verulam	31,06349530890	-29,64610908360
13	Umhlanga	31,08052631320	-29,69790450140

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

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

- Contract No. : **WS 7637**
- Contract Title : **The Provision of Professional Multi-disciplinary Engineering Consulting Services for the development of the Investment Strategy of Wastewater Treatment Works, as and when require, for a period of 24 months**

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**

Parts of each tender offer communicated on paper shall be submitted as an original

Tenderers are to include, with their paper ("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. – **Tenderers Name.PDF**". The memory-stick must be labelled with the Tenderer's name and 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, 21 July 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 T2.2.3: "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 T2.2.12: "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.

### 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, 6<sup>th</sup> 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 Clause F.2.1. Tenderers not in compliance will be deemed non-responsive.

##### Preference Point System

The financial offer will be reduced to a comparative basis using the **Tender Assessment Schedule**.

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 to T2.2.6: “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/ Category Weightings**.

- **Ownership Goal**

Goal Weighting: 100%

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**.

Ownership Categories	Criteria	80/20
<b>Race: Black (w1)</b>	Equals 0%	0
	Between 0% and 51%	8
	Greater or equal to 51% and less than 100%	16
	Equals 100%	20
<b>Gender: Female (w2)</b>	Equals 0%	0
	Between 0% and 51%	0
	Greater or equal to 51% and less than 100%	0
	Equals 100%	0
<b>Disabilities (w3)</b>	Equals 0%	0
	Between 0% and 51%	0
	Greater or equal to 51% and less than 100%	0
	Equals 100%	0
<b>Maximum Goal Points:</b>		20

The **Weightings** of the **Ownership Categories** will be:

- w1 = 100%, w2 = 0%, w3 = 0%

**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.

**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 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.
- (c) 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.
- (d) 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.

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.

**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 paper ("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.– **Tenderers Name.PDF**". The memory-stick must be labelled with the Tenderer's name and 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 eMail: [Simone.Pillay@durban.gov.za](mailto:Simone.Pillay@durban.gov.za)  
P O Box 1394  
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.

## **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.

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 Specific**

T2.2.1	Compulsory Enterprise Questionnaire .....	16
T2.2.2	Certificate of Attendance at Clarification Meeting .....	18
T2.2.3	Tax Compliance Status PIN / Tax Clearance Certificate .....	23
T2.2.4	MBD 4: Declaration of Interest .....	24
T2.2.5	MBD 5: Declaration for Procurement Above R10 Million .....	26
T2.2.6	MBD 6.1: Preference Points Claim Form ITO the Preferential Regulations .....	27
T2.2.7	MBD 8: Declaration of Bidder's Past SCM Practices .....	27
T2.2.8	MBD 9: Certificate of Independent Bid Determination .....	32
T2.2.9	Joint Venture Agreements (if applicable) .....	35
T2.2.10	Record of Addenda to Tender Documents (if applicable).....	36
T2.2.11	Declaration of Municipal Fees .....	37
T2.2.12	CSD Registration Report.....	38

##### **Eligibility Evaluation**

T2.2.13	Experience of Tenderer .....	39
T2.2.14	Tenderer Key Staff.....	57

##### **Returnable**

T2.2.15	Returnable: Tenderer CPG Partners.....	69
---------	--	----

## **T2.2     RETURNABLE SCHEDULES, FORMS, AND CERTIFICATES**

The returnable schedules, forms, and certificates, as listed in T2.1.2, can be found on pages [16](#) to [36](#).

### **NOTE**

The **Form of Offer** (C1.1.1), The **Data to be Provided by Tenderer** (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**

Ref	Description	Complete or Circle Applicable
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	<b>MAAA</b>
1.6	eThekwini Supplier Database: Reference number (PR), if any:	<b>PR</b>
1.7	VAT registration number, if any:	
2.0	<b>Particulars of sole proprietors and partners in partnerships (attach separate pages if more than 4 partners)</b>	
	<b>Full Name</b>	<b>Identity No.</b>
2.1		
2.2		
2.3		
2.4		
3.0	<b>Particulars of companies and close corporations</b>	
3.1	Company registration number, if applicable:	
3.2	Close corporation number, if applicable:	
3.3	Tax Reference number, if any:	
3.4	South African Revenue Service: Tax Compliance Status PIN:	

**4.0 Record in the service of the state** (Insert on a separate page if necessary)

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

- |   |  |
|---|--|
| <input type="checkbox"/> a member of any municipal council  | <input type="checkbox"/> a member of any provincial legislature  |
| <input type="checkbox"/> an official of any municipality or municipal entity  | <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity |
| <input type="checkbox"/> a member of the board of directors of any municipal entity   | <input type="checkbox"/> a member of the National Assembly or the National Council of Province           |
| <input type="checkbox"/> an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) | <input type="checkbox"/> an employee of Parliament or a provincial legislature                           |

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 mths

**5.0 Record of spouses, children and parents in the service of the state** (Insert on a separate page if necessary)

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

- |   |  |
|---|--|
| <input type="checkbox"/> a member of any municipal council  | <input type="checkbox"/> a member of any provincial legislature  |
| <input type="checkbox"/> an official of any municipality or municipal entity  | <input type="checkbox"/> a member of an accounting authority of any national or provincial public entity |
| <input type="checkbox"/> a member of the board of directors of any municipal entity   | <input type="checkbox"/> a member of the National Assembly or the National Council of Province           |
| <input type="checkbox"/> an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999) | <input type="checkbox"/> an employee of Parliament or a provincial legislature                           |

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 mths

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise:

- authorizes the Employer to verify the tenderers tax clearance status from the South African Revenue Services that it is in order.
- confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004.
- confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption.
- confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest.
- confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

**NAME (Block Capitals):**

**Date**

**SIGNATURE:**

**T2.2.2 CERTIFICATE OF ATTENDANCE AT DAY 1 OF 5 DAY CLARIFICATION MEETING/SITE INSPECTION**

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

This is to certify that:

(Tenderer name) .....

of (address) .....

.....

was represented by the person(s) named below at the **Day One** compulsory clarification meeting held for all tenderers at:

- Place : Wastewater Management Building (17 Electron Road)  
Thereafter proceed to the 3 Wastewater Treatment Works  
(Umhlanga, Genazanno and Verulam)
- Date : 10<sup>th</sup> May 2023
- Time : 09H00

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: .....

**Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:**

<b>Name</b>		<b>Surname</b>	
<b>Capacity</b>		<b>Date</b>	
<b>Signature</b>	<b>Site 1: Umhlanga</b>	<b>Site 2: Genazanno</b>	<b>Site 3: Verulam</b>
<b>Time</b>			

## **CERTIFICATE OF ATTENDANCE AT DAY 2 OF 5 DAY CLARIFICATION MEETING / SITE INSPECTION**

This is to certify that:

(Tenderer name) .....

of (address) .....

.....

was represented by the person(s) named below at the **Day Two** compulsory clarification meeting held for all tenderers at:

- Place : Wastewater Management Building (17 Electron Road)  
Thereafter proceed to the 3 Wastewater Treatment Works  
(Craigieburn, Magabeni and Umkomaas)
- Date : 11<sup>th</sup> May 2023
- Time : 09H00

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: .....

**Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:**

Name			Surname		
Capacity			Date		
Signature	Site 1: Craigieburn	Site 2: Magabeni		Site 3: Umkomaas	
Time					

## **CERTIFICATE OF ATTENDANCE AT DAY 3 OF 5 DAY CLARIFICATION MEETING / SITE INSPECTION**

This is to certify that:

(Tenderer name) .....

of (address) .....

.....

was represented by the person(s) named below at the **Day Three** compulsory clarification meeting held for all tenderers at:

- Place : Wastewater Management Building (17 Electron Road)  
Thereafter proceed to the 3 Wastewater Treatment Works  
(Umbilo, Umhaltuzana and Kingsburgh)
- Date : 12<sup>th</sup> May 2023
- Time : 09H00

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: .....

**Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:**

Name			Surname		
Capacity			Date		
Signature	Site 1: Umbilo	Site 2: Umhaltuzana		Site 3: Kingsburgh	
Time					

**CERTIFICATE OF ATTENDANCE AT DAY 4 OF 5 DAY CLARIFICATION MEETING / SITE INSPECTION**

This is to certify that:

(Tenderer name) .....

of (address) .....

.....

was represented by the person(s) named below at the **Day Four** compulsory clarification meeting held for all tenderers at:

- Place : Wastewater Management Building (17 Electron Road)  
Thereafter proceed to the 2 Wastewater Treatment Works  
(Central and Fredville)
- Date : 15<sup>th</sup> May 2023
- Time : 09H00

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: .....

**Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:**

<b>Name</b>		<b>Surname</b>	
<b>Capacity</b>		<b>Date</b>	
<b>Signature</b>	<b>Site 1: Central</b>	<b>Site 2: Fredville</b>	
<b>Time</b>			

**CERTIFICATE OF ATTENDANCE AT DAY 5 OF 5 DAY CLARIFICATION MEETING / SITE INSPECTION**

This is to certify that:

(Tenderer name) .....

of (address) .....

.....

was represented by the person(s) named below at the **Day Five** compulsory clarification meeting held for all tenderers at:

- Place : Wastewater Management Building (17 Electron Road)  
Thereafter proceed to the 2 Wastewater Treatment Works  
(Mpumalanga and New Germany)
- Date : 16<sup>th</sup> May 2023
- Time : 09H00

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: .....

**Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:**

<b>Name</b>		<b>Surname</b>	
<b>Capacity</b>		<b>Date</b>	
<b>Signature</b>	<b>Site 1: Mpumalanga</b>	<b>Site 2: New Germany</b>	
<b>Time</b>			

## **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.

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 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:**



## T2.2.4 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 state**<sup>1</sup>.
- 2 Any person, having a kinship with persons **in the service of the state**, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to **persons in service of the state**, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.
- 3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Name of enterprise	Complete T2.1.2.1 Item 1.1
Name of enterprise's representative	Complete T2.1.2.1 Item 1.2
3.2 ID Number of enterprise's representative	Complete T2.1.2.1 Item 1.3
3.3 Position enterprise's representative occupies in the enterprise	Complete T2.1.2.1 Item 1.4
3.4 Company Registration number	Complete T2.1.2.1 Item 3.1 or 3.2
3.5 Tax Reference number	Complete T2.1.2.1 Item 3.3
3.6 VAT registration number	Complete T2.1.2.1 Item 1.7
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.	
3.8 Are you presently in the service of the state?	
If yes, furnish particulars: .....	
.....	
3.9 Have you been in the service of the state for the past twelve months?	
If yes, furnish particulars: .....	
.....	

<p>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?</p> <p>If yes, furnish particulars: .....</p> <p>.....</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">YES</td> <td style="width: 50%; padding: 5px;">NO</td> </tr> </table>	YES	NO
YES	NO		
<p>3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?</p> <p>If yes, furnish particulars: .....</p> <p>.....</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">YES</td> <td style="width: 50%; padding: 5px;">NO</td> </tr> </table>	YES	NO
YES	NO		
<p>3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?</p> <p>If yes, furnish particulars: .....</p> <p>.....</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">YES</td> <td style="width: 50%; padding: 5px;">NO</td> </tr> </table>	YES	NO
YES	NO		
<p>3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?</p> <p>If yes, furnish particulars: .....</p> <p>.....</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">YES</td> <td style="width: 50%; padding: 5px;">NO</td> </tr> </table>	YES	NO
YES	NO		
<p>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 ?</p> <p>If yes, furnish particulars: .....</p> <p>.....</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">YES</td> <td style="width: 50%; padding: 5px;">NO</td> </tr> </table>	YES	NO
YES	NO		

4 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.	Personal income tax No.
Use additional pages if necessary			

*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:** .....

**T2.2.5 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.

		Circle Applicable	
		YES	NO
1.0	Are you by law required to prepare annual financial statements for auditing?		
1.1	<b>If YES, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.</b>		
2.0	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?	YES	NO
2.1	If NO, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.		
2.2	If YES, provide particulars. ..... .....		
3.0	Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?	YES	NO
3.1	If YES, provide particulars. ..... .....		
4.0	Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?	YES	NO
4.1	If YES, provide particulars. ..... .....		

**If required by 1.1 above, tenderers are to include, at the back of their tender submission document, a printout of their audited annual financial statements.**

*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, if required, that the requested documentation has been included in the tender submission.*

**NAME (Block Capitals):**

**Date**

**SIGNATURE:**

**T2.2.6 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.

**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).
- the 90/10 system for requirements with a Rand value above 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

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

$$P_s = 90 \left( 1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

Where:

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

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

P<sub>min</sub> = Price of lowest acceptable tender

#### 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 maximum points for each goal are indicated per the table below.

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

The Specific Goals to be allocated points in terms of this tender	Maximum Number of points ALLOCATED (80/20 system)	Number of points CLAIMED (80/20 system)
<b>Ownership Goal:</b> Race (black)	20	
<b>Ownership Goal:</b> Gender (female)	n/a	n/a
<b>Ownership Goal:</b> Disabilities	n/a	n/a
<b>RDP Goal:</b> The promotion of South African owned enterprises.	n/a	n/a
<b>RDP Goal:</b> The promotion of export-oriented production to create jobs.	n/a	n/a
<b>RDP Goal:</b> The Creation of new jobs to address black youth unemployment	n/a	n/a
<b>RDP Goal:</b> The promotion of enterprises located in a specific municipal area.	n/a	n/a
<b>RDP Goal:</b> Social upliftment of communities	n/a	n/a
<b>RDP Goal:</b> The promotion of SMMEs owned by PPG (contracts >R5m)	n/a	n/a
<b>Total CLAIMED Points (20 Maximum)</b>		

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:

- 1) The information furnished is true and correct.
- 2) 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:**

## T2.2.7 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.

- 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](http://www.treasury.gov.za)) and can be accessed by clicking on its link at the bottom of the home page.

- 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](http://www.treasury.gov.za)) by clicking on its link at the bottom of the home page.

- 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?

- 4.3.1 If YES, provide particulars.

.....

.....

Circle Applicable	
YES	NO

YES	NO
-----	----

YES	NO
-----	----

4.4 Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?

YES

NO

4.4.1 If YES, provide particulars.

.....  
.....

4.5 Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?

YES

NO

4.5.1 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 be false.*

**NAME (Block Capitals):**

**Date**

**SIGNATURE:**



## T2.2.8 **MBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION**

### **NOTES**

<sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>2</sup> 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.

<sup>3</sup> 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**<sup>1</sup> 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**).<sup>2</sup> 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;
  - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
  - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4.0 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**

I, the undersigned, in submitting the accompanying bid:

-----  
(Bid Number and Description)

in response to the invitation for the bid made by:

-----  
(Name of Municipality / Municipal Entity)

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

I certify, on behalf of:

-----  
(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 consortium<sup>3</sup> will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices.
  - (b) geographical area where product or service will be rendered (market allocation).
  - (c) methods, factors or formulas used to calculate prices.
  - (d) the intention or decision to submit or not to submit, a bid.
  - (e) the submission of a bid which does not meet the specifications and conditions of the bid.
  - (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:**

#### **T2.2.9 JOINT VENTURES AGREEMENTS**

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

## **T2.2.10 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.

<b>ADD. №</b>	<b>DATE</b>	<b>TITLE OR DETAILS</b>
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:**

## T2.2.11 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)

(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:

<u>Account</u>	<u>Account Number: to be completed by tenderer</u>											
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 eThekweni 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.**

*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:**

## T2.2.12 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.

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.

	<b>CENTRAL SUPPLIER DATABASE FOR GOVERNMENT</b>	<b>Report Date:</b> <input type="text"/>	
		<b>Report Ran By:</b> <input type="text"/>	
<b>CSD REGISTRATION REPORT</b>			
<b>SUPPLIER IDENTIFICATION</b>			
Supplier number	<input type="text"/>	Have Bank Account	<input type="text"/>
Is supplier active?	<input type="text"/>	Total annual turnover	<input type="text"/>
Supplier type	<input type="text"/>	Financial year start date	<input type="text"/>
Supplier sub-type	<input type="text"/>	Registration date	<input type="text"/>
Legal name	<input type="text"/>	Created by	<input type="text"/>
Trading name	<input type="text"/>	Created date	<input type="text"/>
Identification type	<input type="text"/>	Edit by	<input type="text"/>
Government breakdown	<input type="text"/>	Edit date	<input type="text"/>
Business status	<input type="text"/>	Restricted Supplier	<input type="text"/>
Country of origin	<input type="text"/>	Restriction Last Verification Date	<input type="text"/>
South African company/CC registration number	<input type="text"/>		

**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, 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:**

### T2.2.13 EXPERIENCE OF TENDERER

The experience of the tendering entity or joint venture partners in the case of an unincorporated joint venture or consortium, as opposed to the key staff members / experts, in projects of similar type and scale (> 5000 people) over the last five years must meet the following eligibility criteria:

- a. has successfully completed a minimum of 2 Treatment Works Conditional/Functionality Assessment projects within the past 15 years
- b. has successfully completed a minimum of 1 Municipal Treatment Works Conditional/Functionality Assessment projects within the past 10 years
- c. has successfully completed a minimum of 5 Infrastructure Conditional/Functionality Assessment projects within the past 10 years
- d. has undertaken a wastewater microbial agent study; where the study for the wastewater microbial agent must have been for one of the following: Parasite eggs, Listeria, Helminths, Protozoa, Escherichia coli, Faecal streptococci and Coliforms

Tenderers are to submit **one** of the following, in verification to the above claimed:

- Copies of signed completion certificates for all projects (located after each claim experience); or,
- Written correspondence from previous Client on the Tenderers participation and contract details, per claimed project (located after each claim experience); or,
- Copies of final certificates for all projects, per claimed project (located after each claim experience)

Please complete/attach your Tenderer Experience Schedules and Signed Completion Certificates; or, Final Certificate; or, Client Correspondence within the stipulated pages (no other locations).

Should one of the above mentioned **not be submitted (verifying your experience)**, your experience submission will be **deemed as incomplete** and will be considered **not eligible**.

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



**Tenderer's Experience:** Minimum 5 Treatment Works Conditional/Functionality Assessment Projects




Treatment Works Project №: One

Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Treatment Works Project №: One)

**To be attached here**




Treatment Works Project №: Two

Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Treatment Works Project №: Two)

**To be attached here**

**Tenderer's Experience:** Minimum 2 Municipal Treatment Works Conditional/Functionality Assessment ProjectsMunicipal Treatment Works Project №: One




Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Municipal Treatment Works Project №: One)

**To be attached here**

**Tenderer's Experience:** Minimum 5 Infrastructure Conditional/Functionality Assessment Projects

Infrastructure Project №: One




Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Infrastructure Project №: One)

**To be attached here**






Infrastructure Project №: Two

Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Infrastructure Project №: Two)

**To be attached here**




Infrastructure Project №: Three

Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Infrastructure Project №: Three)

**To be attached here**




Infrastructure Project №: Four

Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Infrastructure Project №: Four)

**To be attached here**

Infrastructure Project №: Five

Client/ Company Name			Client/Company Representative		
Client/ Company Address and Contact Number					
	Office 		Cell 		
Project Description					
Commencement Date	dd / mm / yyyy	Completion Date	dd / mm / yyyy	Project Value	
Details of Work Undertaken	<u>Civil:</u>				
	<u>Chemical:</u>				
	<u>Electrical:</u>				
	<u>Mechanical:</u>				
	<u>Instrumentation:</u>				

Signed Completion Certificates or Written Client Correspondence or Final Certificate  
(Infrastructure Project №: Five)

**To be attached here**



Wastewater Microbial Agent Study

Wastewater Microbial Agent Study which are vague or unclear will not be considered

<b>Wastewater Microbial Agent Study Details</b>			
Wastewater Microbial Agent Study Name			
Details of Client, whom study was undertaken	Client Name/Company	Client Responsible Person Name	Client Responsible Person Contact Number
	Client Address		
Year of Study untaken		Year of Study completed	
<b>Brief Synopsis of Wastewater Microbial Agent Study</b> <i>(The Study headings are to be listed and briefly discussed – extracting the essence of the heading content)</i>			

*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 PROPOSED ORGANISATION and STAFFING

The tenderer shall provide the structure and composition of their team i.e., the main operational areas involved, the key staff member / expert responsible for each area, and the technical and support staff (In the case of an association / joint venture / consortium, it should, indicate how the duties and responsibilities are to be shared); in addition, complete the Personnel Schedule (on page 57) to this page. The table below are staff who are required for eligibility and must be highlighted in the structure and C.V's provided. Listed staff CVs will **not more than 2 pages each**, and must be attached to following **pages ONLY**:

- |           |   |                       |           |   |                             |
|-----------|---|-----------------------|-----------|---|-----------------------------|
| • Page 58 | - | Project Manager       | • Page 59 | - | Civil Engineering           |
| • Page 60 | - | Chemical Engineer     | • Page 61 | - | Mechanical Engineering      |
| • Page 62 | - | Electrical Manager    | • Page 63 | - | Instrumentation Engineering |
| • Page 64 | - | Civil Technician      | • Page 65 | - | Chemical Technician         |
| • Page 66 | - | Mechanical Technician | • Page 67 | - | Electrical Technician       |
| • Page 68 | - | Quantity Surveyor     |           |   |                             |

<b><u>Project Manager</u></b> <ul style="list-style-type: none"> <li>• have an active professional registration as a Project Manager with Project Management South Africa (PMSA) or The South African Council for the Project and Construction Management Professions (SACPCMP)</li> <li>• have minimum 15 years project management experience in one of the following disciplines: Civil, Chemical, Mechanical, Electrical and Instrumentation.</li> </ul>	<b><u>Civil Engineer</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in civil engineering</li> <li>• have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 10 years' Civil experience post professional registration</li> </ul>	<b><u>Chemical Engineer</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in chemical engineering</li> <li>• have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 10 chemical years' experience post professional registration</li> </ul>
<b><u>Mechanical Engineer</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in mechanical engineering</li> <li>• have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 10 mechanical years' experience post professional registration</li> </ul>	<b><u>Electrical Engineer</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in electrical engineering</li> <li>• have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 10 electrical years' experience post professional registration</li> </ul>	<b><u>Instrumentation Engineer</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in instrumentation engineering</li> <li>• have an active professional registration as a Professional Engineer (Pr. Eng.) and/or Professional Technologist (Pr. Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 10 instrumentation years' experience post professional registration</li> </ul>
<b><u>Civil Technician</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in civil engineering</li> <li>• have an active professional registration as a Professional Technician (Pr. Techni/Pr Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 5 years' Civil experience post professional registration</li> </ul>	<b><u>Chemical Technician</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in chemical engineering</li> <li>• have an active professional registration as Professional Technician (Pr. Techni/Pr Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 5 chemical years' experience post professional registration</li> </ul>	<b><u>Mechanical Technician</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in mechanical engineering</li> <li>• have an active professional registration as a Professional Technician (Pr. Techni/Pr Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 5 mechanical years' experience post professional registration</li> </ul>
<b><u>Electrical Technician</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in electrical engineering</li> <li>• have an active professional registration as a Professional Technician (Pr. Techni/Pr Tech Eng.) with Engineering Council of South Africa (ECSA)</li> <li>• have a minimum of 5 electrical years' experience post professional registration</li> </ul>	<b><u>Quantity Surveyor</u></b> <ul style="list-style-type: none"> <li>• have a tertiary qualification in quantity surveyor</li> <li>• have an active professional registration as a Professional Quantity Surveyor (Pr. QS.) with The SA Council for the Quantity Surveying Profession (SACQSP)</li> <li>• have a minimum of 10 quantity surveyor years' experience post professional registration</li> </ul>	

*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:

Personnel Schedule				
Key Resource	Name and Surname	Qualification	Years of Experience	Period of Engagement (estimate weeks)
Program Manager <i>Page 58</i>				
Civil Engineer <i>Page 59</i>				
Chemical Engineer <i>Page 60</i>				
Mechanical Engineer <i>Page 61</i>				
Electrical Engineer <i>Page 62</i>				
Instrumentation Engineer <i>Page 63</i>				
Civil Technician <i>Page 64</i>				
Chemical Technician <i>Page 65</i>				
Mechanical Technician <i>Page 66</i>				
Electrical Technician <i>Page 67</i>				
Quantity Surveyor <i>Page 68</i>				

Tenderer Key Staff Experience: Program Manager

The CV of the Program Manager must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Program Manager Details														
Full Name and Surname														
ID № or Passport №													Age	
Tertiary Institution Attended														
Relevant Qualification/s											Year Obtained			
Professional Institution Registered With											Registration №			
Key Staff Experience: Program Manager Employment History														
<i>(To be listed in chronological order with reference to relevant experience only)</i>														
Employment Period (mm/yy to mm/yy)	Name of Employer		Program Manager Experience (15 years required in one of the following disciplines: civil, chemical, mechanical, electrical and instrumentation)											

*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:

Tenderer Key Staff Experience: Civil Engineer

The CV of the Civil Engineer must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Civil Engineer Details														
Full Name and Surname														
ID № or Passport №													Age	
Tertiary Institution Attended														
Relevant Qualification/s											Year Obtained			
Professional Institution Registered With											Registration №			
Key Staff Experience: Civil Engineer Employment History														
<i>(To be listed in chronological order with reference to relevant experience only)</i>														
Employment Period (mm/yy to mm/yy)	Name of Employer					Civil Engineer Experience (minimum of 10 years required post registration)								

*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:

Tenderer Key Staff Experience: Chemical Engineer

The CV of the Chemical Engineer must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Chemical Engineer Details															
Full Name and Surname															
ID № or Passport №														Age	
Tertiary Institution Attended															
Relevant Qualification/s											Year Obtained				
Professional Institution Registered With											Registration №				
Key Staff Experience: Chemical Engineer Employment History (To be listed in chronological order with reference to relevant experience only)															
Employment Period (mm/yy to mm/yy)	Name of Employer				Chemical Engineer Experience (minimum of 10 years required post registration)										

*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:

Tenderer Key Staff Experience: Mechanical Engineer

The CV of the Mechanical Engineer must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Mechanical Engineer Details														
Full Name and Surname														
ID № or Passport №													Age	
Tertiary Institution Attended														
Relevant Qualification/s											Year Obtained			
Professional Institution Registered With											Registration №			
Key Staff Experience: Mechanical Engineer Employment History														
<i>(To be listed in chronological order with reference to relevant experience only)</i>														
Employment Period (mm/yy to mm/yy)	Name of Employer					Mechanical Engineer Experience (minimum of 10 years required post registration)								

*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:

Tenderer Key Staff Experience: Electrical Engineer

The CV of the Electrical Engineer must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Electrical Engineer Details														
Full Name and Surname														
ID № or Passport №													Age	
Tertiary Institution Attended														
Relevant Qualification/s											Year Obtained			
Professional Institution Registered With											Registration №			
Key Staff Experience: Electrical Engineer Employment History (To be listed in chronological order with reference to relevant experience only)														
Employment Period (mm/yy to mm/yy)	Name of Employer					Electrical Engineer Experience (minimum of 10 years required post registration)								

*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:



Tenderer Key Staff Experience: Instrumentation Engineer

The CV of the Instrumentation Engineer must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Instrumentation Engineer Details														
Full Name and Surname														
ID № or Passport №													Age	
Tertiary Institution Attended														
Relevant Qualification/s											Year Obtained			
Professional Institution Registered With											Registration №			
Key Staff Experience: Instrumentation Engineer Employment History														
<i>(To be listed in chronological order with reference to relevant experience only)</i>														
Employment Period (mm/yy to mm/yy)	Name of Employer					Instrumentation Engineer Experience (minimum of 10 years required post registration)								

*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:

Tenderer Key Staff Experience: Civil Technician

The CV of the Civil Technician must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Civil Technician Details															
Full Name and Surname															
ID № or Passport №														Age	
Tertiary Institution Attended															
Relevant Qualification/s											Year Obtained				
Professional Institution Registered With											Registration №				
Key Staff Experience: Civil Technician Employment History															
<i>(To be listed in chronological order with reference to relevant experience only)</i>															
Employment Period (mm/yy to mm/yy)	Name of Employer				Civil Technician Experience (minimum of 5 years required post registration)										

*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:

Tenderer Key Staff Experience: Chemical Technician

The CV of the Chemical Technician must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Chemical Technician Details															
Full Name and Surname															
ID № or Passport №														Age	
Tertiary Institution Attended															
Relevant Qualification/s											Year Obtained				
Professional Institution Registered With											Registration №				
Key Staff Experience: Chemical Technician Employment History															
<i>(To be listed in chronological order with reference to relevant experience only)</i>															
Employment Period (mm/yy to mm/yy)	Name of Employer				Chemical Technician Experience (minimum of 5 years required post registration)										

*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:

Tenderer Key Staff Experience: Mechanical Technician

The CV of the Mechanical Technician must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Mechanical Technician Details															
Full Name and Surname															
ID № or Passport №														Age	
Tertiary Institution Attended															
Relevant Qualification/s											Year Obtained				
Professional Institution Registered With											Registration №				
Key Staff Experience: Mechanical Technician Employment History															
<i>(To be listed in chronological order with reference to relevant experience only)</i>															
Employment Period (mm/yy to mm/yy)	Name of Employer				Mechanical Technician Experience (minimum of 5 years required post registration)										

*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:

Tenderer Key Staff Experience: Electrical Technician

The CV of the Electrical Technician must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Electrical Technician Details														
Full Name and Surname														
ID № or Passport №													Age	
Tertiary Institution Attended														
Relevant Qualification/s											Year Obtained			
Professional Institution Registered With											Registration №			
Key Staff Experience: Electrical Technician Employment History														
<i>(To be listed in chronological order with reference to relevant experience only)</i>														
Employment Period (mm/yy to mm/yy)	Name of Employer					Electrical Technician Experience (minimum of 5 years required post registration)								

*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:

Tenderer Key Staff Experience: Quantity Surveyor

The CV of the Quantity Surveyor must not be more than 2 pages and should be attached to this page; which must contain relevant work experience only. CV's which are vague or unclear will not be considered

Key Staff Experience: Quantity Surveyor Details														
Full Name and Surname														
ID № or Passport №													Age	
Tertiary Institution Attended														
Relevant Qualification/s											Year Obtained			
Professional Institution Registered With											Registration №			
Key Staff Experience: Quantity Surveyor Employment History														
<i>(To be listed in chronological order with reference to relevant experience only)</i>														
Employment Period (mm/yy to mm/yy)	Name of Employer					Quantity Surveyor Experience (minimum of 10 years required post registration)								

*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:

**T2.2.15      RETURNABLE: TENDERER CPG PARTNERS**

This form is to be copied and used for each submission of CPG partner, as may be required.

CPG Partners	
<u>CPG Partner One</u>	
Company Name	
Company Representative	
Company Address	
Company Contact Number	
<u>CPG Partner Two</u>	
Company Name	
Company Representative	
Company Address	
Company Contact Number	
<u>CPG Partner Three</u>	
Company Name	
Company Representative	
Company Address	
Company Contact Number	

Tenderers are to include along with their submission a printout of each CPG Partner listed above, the following:

- **CIDB Registration**, obtained from the CIDB website ( <https://registers.cidb.org.za/PublicContractors/ContractorSearch> )
- **CSD Report**, obtained from the CSD website ( <https://secure.csd.gov.za/Account/Login> )
- **CIPC**, obtained from the CIPC website ( <https://eservices.cipc.co.za> )

*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:**

**PART C1 : AGREEMENTS 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: **WS 7637**

Contract Title: **The Provision of Professional Multi-disciplinary Engineering Consulting Services for the development of the Investment Strategy of Wastewater Treatment Works, as and when require, for a period of 24 months**

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 Service Provider under the Contract including compliance with all its terms and conditions according to their true intent and meaning for the final average total rate to be determined in accordance with the Conditions of Contract identified in the Contract Data.

**\* The offered final average total Rate is:**

R..... (In words .....)

.....)

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

**For the Tenderer:**

**\* Name of Tenderer** (organisation) : .....

**\* Signature** (of person authorized to sign the tender) : .....

**\* Name** (of signatory in capitals) : .....

**Capacity** (of Signatory) : .....

**Address** : .....

: .....

**Witness:**

**Signature** : .....

**Name**(in capitals) : : .....

**Date** : .....

**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**

**This Form will be completed by the Employer**

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 Service Provider 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.

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 Work
- Part 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 Service Provider) 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** : ..... **Date** : .....

**Name**(*in capitals*) : : .....

## **C1.1 : FORM OF OFFER AND ACCEPTANCE**

### **C1.1.3 : SCHEDULE OF DEVIATIONS**

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

1.   **Subject**       : .....
- Details**     : .....
- : .....
2.   **Subject**       : .....
- Details**     : .....
- : .....
3.   **Subject**       : .....
- Details**     : .....
- : .....

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

#### **FOR THE TENDERER**

#### **FOR THE EMPLOYER**

.....	Signature	.....
.....	Name ( <i>in capitals</i> )	.....
.....	Capacity	.....
.....	Name and Address of	.....
.....	Organisation	.....
.....		.....
.....		.....
.....	Witness Signature	.....
.....	Witness Name	.....
.....	Date	.....

## **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](http://www.cidb.co.za) - copied for ease of reference in C4.2).

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 eThekweni Municipality as represented by : Deputy Head : **Sanitation Operations**

3.4 & The authorised and designated representative of the Employer is: **Lusapho Tshangela**

4.3.2 The contact details of the authorised and designated representative are:

- Telephone : **031 311 2671**
- e-mail : **Lusapho.Tshangela@durban.gov.za**

The address for the Receipt of communications is: **Water and Sanitation: 3 Prior Road, Durban, 4001**

1 The Project is : **WS 7637**  
: **The Provision of Professional Multi-disciplinary Engineering Consulting Services for the development of the Investment Strategy of Wastewater Treatment Works, as and when require, for a period of 24 months**

1 Period of Performance : **48 weeks**

1 Start Date : **This will be post the Letter of Award and the 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 : **the City's 27 Wastewater Treatment Works**

No	Treatment Works Name	No	Treatment Works Name
1	Tongaai Wastewater Treatment Works	15	Hammarisdale Wastewater Treatment Works
2	Genazzano Wastewater Treatment Works	16	Kwandengezi Wastewater Treatment Works
3	Umdloti Wastewater Treatment Works	17	Hillcrest Wastewater Treatment Works
4	Verulam Wastewater Treatment Works	18	Glenwood Wastewater Treatment Works
5	Umhlanga Wastewater Treatment Works	19	Fredville Wastewater Treatment Works
6	Phoenix Wastewater Treatment Works	20	Dassenhoek Wastewater Treatment Works
7	Kwamashu Wastewater Treatment Works	21	Cato Ridge Wastewater Treatment Works
8	Northern Wastewater Treatment Works	22	Mpumalanga Wastewater Treatment Works
9	New Germany Wastewater Treatment Works	23	Amanzimtoti Wastewater Treatment Works
10	Umbilo Wastewater Treatment Works	24	Kingsburgh Wastewater Treatment Works
11	Umhlathuzana Wastewater Treatment Works	25	Craigieburn Wastewater Treatment Works
12	Central Wastewater Treatment Works	26	Magabeni Wastewater Treatment Works
13	Southern Wastewater Treatment Works	27	Umkomaas Wastewater Treatment Works
14	Isipingo Wastewater Treatment Works		

3.6 The Service Provider may not release public or media statements or publish material related to the Services or Project under any circumstances.

3.9.2 The time-based fees used to determine changes to the Contract Price are as stated in the Pricing Data.

3.12 The penalty per Day payable is : **Not applicable**

3.15.1 The programme shall be submitted within **28 Days** of the award of the Contract.

3.15.2 The Service Provider shall update the programme at intervals not exceeding **5 weeks**.

3.16 The time-based fees shall not be adjusted for inflation.

3.16.2 The indices are those contained in **Table A of P0141 Consumer Price Index** for "CPI for services" Published by Statistics South Africa.

4.3.1(d) The Service Provider is not required to assist in the obtaining of approvals, licenses and permits from the state, regional and municipal authorities having jurisdiction over the Project.

5.4.1 The Service Provider is required to provide Professional indemnity in an amount of : **R 26 000 000-00**.

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 personnel in accordance with the provisions of clause 7.2 and to complete the Personnel Schedule.

8.1 The Service Provider is to commence the performance of the Services within **7 Days** of date that the Contract becomes effective.

- 8.2.1 The Contract is concluded when : **24 months post commencement date**
- 9.1 Copyright of documents prepared for the Project shall be vested with the **Employer**.
- 11.1 A Service Provider may subcontract any work which he has the skill and competency to perform.
- 12.1 Interim settlement of disputes is to be by **Adjudication**.
- 12.2/3 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 26 000 000-00**.
- 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 either Party to the other in respect of liability under the Contract is limited to **R 26 000 000-00**.
- 13.5.1 The provisions of 13.5 do not apply to the Contract.
- 13.6 The provisions of 13.6 do not apply to the Contract.
- 15 The interest rate will be prime interest rate of the Employers bank at the time that the amount is due.

### **C1.2.3      ADDITIONAL CONDITIONS OF CONTRACT**

The additional conditions of contract are:

#### **C1.2.3.1      PERFORMANCE MONITORING OF SERVICE PROVIDERS**

For contract awards that are greater than R10m, the Service Provider shall be subjected to “Performance Monitoring” assessments in terms of the applicable Section of the Council’s current Supply Chain Management Policy.

#### **C1.2.3.2      RETENTION**

For consultant services in respect of construction contracts, 10% retention will be applied until the provision and acceptance of the final ‘as-built’ drawings.

#### **C1.2.3.3      EMPOWERMENT INITIATIVE**

It is a condition of contract that the Professional Service Provider / Civil Engineering Consultant must allow for a minimum of 30% of the contract value (excluding PC Sum and Fixed Cost allowances) to be subcontracted to persons who are black owned. Proof of payment to the subcontractors will be required to verify that the minimum has been achieved.

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.

**C1.2.2.2 DATA TO BE PROVIDED BY THE SERVICE PROVIDER**

Ref / Clause Number	Data
1	<p>The Service Provider is: .....</p> <p>.....</p> <p>Address : .....</p> <p>.....</p> <p>.....</p> <p>Telephone : ..... Fax : .....</p>
5.3	<p>The authorised and designated representative of the Service Provider is:</p> <p>Name : .....</p> <p>The address for receipt of communications is:</p> <p>Address : .....</p> <p>.....</p> <p>.....</p> <p>Telephone : ..... Fax : .....</p> <p>E-Mail : .....</p>
1	<p>The Period of Performance is : 24 months</p>
5.5 & 7.1.2	<p>The Key Persons and their jobs / functions in relation to the services are:</p> <p>Name : .....</p> <p>Specific Duties : .....</p> <p>Name : .....</p> <p>Specific Duties : .....</p>

**PART C2 : PRICING DATA**  
**C2.1 : PRICING INSTRUCTIONS**

- C 2.1.1** The Service Provider is required to provide all the services necessary to undertake the project requirements in accordance with the Scope of Work. This includes all things necessary and incidental to providing the Services, including appointment and payment of subcontractors.

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.

The Pricing Schedule forms part of the Contract Document and must be read and priced in conjunction with all other documents comprising the Contract Document, which include the Tender Data, Conditions of Contract, Scope of Work and any applicable drawings and documents.

**C 2.1.2 Rates Based Schedule**

This is a Rates based contract and all quantities will be measured during the execution of the work.

**C 2.1.3 Pricing of the Schedule of Quantities**

Only numeric values shall be used to complete the Pricing Schedule. The use of alphabets will not be accepted, and any items tendered as "Incl", "Nil", etc. will be replaced with a zero numeric value. Any items left blank for which a value should have been tendered will be treated as having a zero rate and amount.

**C 2.1.4 Corrections of Schedule of Quantities Entries**

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry and the alteration must be initialled by the Tenderer.

**C 2.1.5 Arithmetical Errors**

Arithmetical errors found in the Schedule of Quantities as a result of incorrect arithmetic will be corrected by the Employer at the tender evaluation stage, as set out in the Tender Data.

**C 2.1.6 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 electronic spreadsheet format using the standard payment template provided by the Employer.



## C2.2 : PRICING SCHEDULE

Item No	Payment Reference	Description	Unit	Rate
Part 1	PS 1 - 17	Time Related - Professional Services		
1.1		Program Manager	Hour	R —
1.2		Civil Engineer	Hour	R —
1.3		Chemical Engineer	Hour	R —
1.4		Mechanical Engineer	Hour	R —
1.5		Electrical Engineer	Hour	R —
1.6		Instrumentation Engineer	Hour	R —
1.7		Civil Technician	Hour	R —
1.8		Chemical Technician	Hour	R —
1.9		Mechanical Technician	Hour	R —
1.10		Electrical Technician	Hour	R —
1.11		Quality Surveyor	Hour	R —
Part 1	PS 1 - 17	Time related – Plant and Equipment		
1.12		High-Pressure Jetting	M	R —
1.13		Digital Cameral – CCTV	M	R —
1.14		TLB	Daily	R —
<b><u>Sub-Total</u></b> (transferred sub-total to Page 176)			R	—

Item №	Payment Reference	Description	Unit	Rate
Part 2	PS 1 – 17	Preliminary Treatment		
2.1	PS 1 - 17	HOW - Screening: Mechanical Screens		
2.1.1		Equipment Condition Assessment	№	R —
2.1.2		Equipment Specifications Development	№	R —
2.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
2.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
2.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
2.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
2.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
2.1.8		Maintenance Procedures	№	R —
2.1.9		Operating Procedures	№	R —
2.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
2.2	PS 1 - 17	HOW - Screening: Washer and Compactor			
2.2.1		Equipment Condition Assessment	№	R	—
2.2.2		Equipment Specifications Development	№	R	—
2.2.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
2.2.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
2.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
2.2.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
2.2.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
2.2.8		Maintenance Procedures	№	R	—
2.2.9		Operating Procedures	№	R	—
2.2.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
2.3	PS 1 - 17	HOW - Screening: Cables, Panels, and Instrumentation			
2.3.1		Equipment Condition Assessment	№	R	—
2.3.2		Equipment Specifications Development	№	R	—
2.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
2.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
2.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
2.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
2.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
2.3.8		Maintenance Procedures	№	R	—
2.3.9		Operating Procedures	№	R	—
2.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
2.4	PS 1 - 17	Grit Removal: Mechanical Degritters			
2.4.1		Equipment Condition Assessment	№	R	—
2.4.2		Equipment Specifications Development	№	R	—
2.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
2.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
2.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
2.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
2.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
2.4.8		Maintenance Procedures	№	R	—
2.4.9		Operating Procedures	№	R	—
2.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
2.5	PS 1 - 17	Grit Removal: Grit Washers or Classifiers			
2.5.1		Equipment Condition Assessment	№	R	—
2.5.2		Equipment Specifications Development	№	R	—
2.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
2.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
2.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
2.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
2.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
2.5.8		Maintenance Procedures	№	R	—
2.5.9		Operating Procedures	№	R	—
2.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
2.6	PS 1 - 17	Grit Removal: Cables, Panels, and Instrumentation			
2.6.1		Equipment Condition Assessment	№	R	—
2.6.2		Equipment Specifications Development	№	R	—
2.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
2.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
2.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
2.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
2.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
2.6.8		Maintenance Procedures	№	R	—
2.6.9		Operating Procedures	№	R	—
2.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Sub-Total (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 3	PS 1 - 17	Primary Treatment		
3.1	PS 1 - 17	Primary Sedimentation: Scum Removal		
3.1.1		Equipment Condition Assessment	№	R —
3.1.2		Equipment Specifications Development	№	R —
3.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
3.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
3.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
3.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
3.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
3.1.8		Maintenance Procedures	№	R —
3.1.9		Operating Procedures	№	R —
3.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
3.2	PS 1 - 17	Primary Sedimentation: Bridge Framework			
3.2.1		Equipment Condition Assessment	№	R	—
3.2.2		Equipment Specifications Development	№	R	—
3.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
3.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
3.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
3.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
3.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
3.2.8		Maintenance Procedures	№	R	—
3.2.9		Operating Procedures	№	R	—
3.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
3.3	PS 1 - 17	Primary Sedimentation: Bridge Wheel			
3.3.1		Equipment Condition Assessment	№	R	—
3.3.2		Equipment Specifications Development	№	R	—
3.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
3.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
3.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
3.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
3.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
3.3.8		Maintenance Procedures	№	R	—
3.3.9		Operating Procedures	№	R	—
3.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
3.4	PS 1 - 17	Primary Sedimentation: Motor and Gearbox			
3.4.1		Equipment Condition Assessment	№	R	—
3.4.2		Equipment Specifications Development	№	R	—
3.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
3.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
3.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
3.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
3.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
3.4.8		Maintenance Procedures	№	R	—
3.4.9		Operating Procedures	№	R	—
3.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
3.5	PS 1 - 17	Primary Sedimentation: Raw Sludge Pumps			
3.5.1		Equipment Condition Assessment	№	R	—
3.5.2		Equipment Specifications Development	№	R	—
3.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
3.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
3.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
3.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
3.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
3.5.8		Maintenance Procedures	№	R	—
3.5.9		Operating Procedures	№	R	—
3.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
3.6	PS 1 - 17	Primary Sedimentation: Raw Sludge Screen			
3.6.1		Equipment Condition Assessment	№	R	—
3.6.2		Equipment Specifications Development	№	R	—
3.6.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
3.6.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
3.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
3.6.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
3.6.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
3.6.8		Maintenance Procedures	№	R	—
3.6.9		Operating Procedures	№	R	—
3.6.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
3.7	PS 1 - 17	Primary Sedimentation: Control Valves			
3.7.1		Equipment Condition Assessment	№	R	—
3.7.2		Equipment Specifications Development	№	R	—
3.7.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
3.7.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
3.7.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
3.7.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
3.7.7		Other Technical Recommendations (including long term planning factors)	№	R	—
3.7.8		Maintenance Procedures	№	R	—
3.7.9		Operating Procedures	№	R	—
3.7.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
3.8	PS 1 - 17	Primary Sedimentation: Cables, Panels, and Instrumentation			
3.8.1		Equipment Condition Assessment	№	R	—
3.8.2		Equipment Specifications Development	№	R	—
3.8.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
3.8.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
3.8.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
3.8.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
3.8.7		Other Technical Recommendations (including long term planning factors)	№	R	—
3.8.8		Maintenance Procedures	№	R	—
3.8.9		Operating Procedures	№	R	—
3.8.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Sub-Total (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 4	PS 1 - 17	Biological Treatment		
4.1	PS 1 - 17	Biofiltration: Effluent Distribution Mechanism		
4.1.1		Equipment Condition Assessment	№	R —
4.1.2		Equipment Specifications Development	№	R —
4.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
4.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
4.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
4.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
4.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
4.1.8		Maintenance Procedures	№	R —
4.1.9		Operating Procedures	№	R —
4.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
4.2	PS 1 - 17	Biofiltration: Cables, Panels, and Instrumentation			
4.2.1		Equipment Condition Assessment	№	R	—
4.2.2		Equipment Specifications Development	№	R	—
4.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
4.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
4.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
4.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
4.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
4.2.8		Maintenance Procedures	№	R	—
4.2.9		Operating Procedures	№	R	—
4.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
4.3	PS 1 - 17	Activated Sludge: Aerators Module (Gearbox and Impeller)			
4.3.1		Equipment Condition Assessment	№	R	—
4.3.2		Equipment Specifications Development	№	R	—
4.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
4.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
4.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
4.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
4.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
4.3.8		Maintenance Procedures	№	R	—
4.3.9		Operating Procedures	№	R	—
4.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
4.4	PS 1 - 17	Activated Sludge: Aerators Gearbox			
4.4.1		Equipment Condition Assessment	№	R	—
4.4.2		Equipment Specifications Development	№	R	—
4.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
4.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
4.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
4.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
4.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
4.4.8		Maintenance Procedures	№	R	—
4.4.9		Operating Procedures	№	R	—
4.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
4.5	PS 1 - 17	Activated Sludge: Aerators Impeller			
4.5.1		Equipment Condition Assessment	№	R	—
4.5.2		Equipment Specifications Development	№	R	—
4.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
4.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
4.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
4.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
4.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
4.5.8		Maintenance Procedures	№	R	—
4.5.9		Operating Procedures	№	R	—
4.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
4.6	PS 1 - 17	Activated Sludge: Cables, Panels, and Instrumentation			
4.6.1		Equipment Condition Assessment	№	R	—
4.6.2		Equipment Specifications Development	№	R	—
4.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
4.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
4.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
4.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
4.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
4.6.8		Maintenance Procedures	№	R	—
4.6.9		Operating Procedures	№	R	—
4.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
<b>Sub-Total</b> (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 5	PS 1 - 17	Secondary Treatment		
5.1	PS 1 - 17	Secondary Settling Tank: Humus		
5.1.1		Equipment Condition Assessment	№	R —
5.1.2		Equipment Specifications Development	№	R —
5.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
5.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
5.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
5.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
5.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
5.1.8		Maintenance Procedures	№	R —
5.1.9		Operating Procedures	№	R —
5.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.2	PS 1 - 17	Secondary Settling Tank Treatment: Valves			
5.2.1		Equipment Condition Assessment	№	R	—
5.2.2		Equipment Specifications Development	№	R	—
5.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.2.8		Maintenance Procedures	№	R	—
5.2.9		Operating Procedures	№	R	—
5.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.3	PS 1 - 17	Secondary Settling Tank: Bridge Framework			
5.3.1		Equipment Condition Assessment	№	R	—
5.3.2		Equipment Specifications Development	№	R	—
5.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.3.8		Maintenance Procedures	№	R	—
5.3.9		Operating Procedures	№	R	—
5.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.4	PS 1 - 17	Secondary Settling Tank: Motors			
5.4.1		Equipment Condition Assessment	№	R	—
5.4.2		Equipment Specifications Development	№	R	—
5.4.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
5.4.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
5.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.4.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
5.4.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
5.4.8		Maintenance Procedures	№	R	—
5.4.9		Operating Procedures	№	R	—
5.4.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.5	PS 1 - 17	Secondary Settling Tank: Siphons			
5.5.1		Equipment Condition Assessment	№	R	—
5.5.2		Equipment Specifications Development	№	R	—
5.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.5.8		Maintenance Procedures	№	R	—
5.5.9		Operating Procedures	№	R	—
5.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.6	PS 1 - 17	Secondary Settling Tank: Return Pumps			
5.6.1		Equipment Condition Assessment	№	R	—
5.6.2		Equipment Specifications Development	№	R	—
5.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.6.8		Maintenance Procedures	№	R	—
5.6.9		Operating Procedures	№	R	—
5.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.7	PS 1 - 17	Secondary Settling Tank: Return Screw Conveyors			
5.7.1		Equipment Condition Assessment	№	R	—
5.7.2		Equipment Specifications Development	№	R	—
5.7.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.7.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.7.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.7.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.7.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.7.8		Maintenance Procedures	№	R	—
5.7.9		Operating Procedures	№	R	—
5.7.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.8	PS 1 - 17	Secondary Settling Tank: Return Screw Motor			
5.8.1		Equipment Condition Assessment	№	R	—
5.8.2		Equipment Specifications Development	№	R	—
5.8.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.8.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.8.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.8.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.8.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.8.8		Maintenance Procedures	№	R	—
5.8.9		Operating Procedures	№	R	—
5.8.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.9	PS 1 - 17	Secondary Settling Tank: Return Screw Gearbox			
5.9.1		Equipment Condition Assessment	№	R	—
5.9.2		Equipment Specifications Development	№	R	—
5.9.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.9.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.9.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.9.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.9.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.9.8		Maintenance Procedures	№	R	—
5.9.9		Operating Procedures	№	R	—
5.9.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.10	PS 1 - 17	Secondary Settling Tank: Bearing and Grease Pots			
5.10.1		Equipment Condition Assessment	№	R	—
5.10.2		Equipment Specifications Development	№	R	—
5.10.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.10.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.10.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.10.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.10.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.10.8		Maintenance Procedures	№	R	—
5.10.9		Operating Procedures	№	R	—
5.10.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
5.11	PS 1 - 17	Secondary Settling Tank: Cables, Panels, and Instrumentation			
5.11.1		Equipment Condition Assessment	№	R	—
5.11.2		Equipment Specifications Development	№	R	—
5.11.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
5.11.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
5.11.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
5.11.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
5.11.7		Other Technical Recommendations (including long term planning factors)	№	R	—
5.11.8		Maintenance Procedures	№	R	—
5.11.9		Operating Procedures	№	R	—
5.11.10		Operating and Maintenance Budget (Recommendations)	№	R	—
<b>Sub-Total</b> (transferred sub-total to Page 176)				R	—



Item №	Payment Reference	Description	Unit	Rate
Part 6	PS 1 - 17	Disinfection		
6.1	PS 1 - 17	Disinfection: Full System Upgrade		
6.1.1		Equipment Condition Assessment	№	R —
6.1.2		Equipment Specifications Development	№	R —
6.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
6.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
6.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
6.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
6.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
6.1.8		Maintenance Procedures	№	R —
6.1.9		Operating Procedures	№	R —
6.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.2	PS 1 - 17	Disinfection: Vacuum Regulators			
6.2.1		Equipment Condition Assessment	№	R	—
6.2.2		Equipment Specifications Development	№	R	—
6.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.2.8		Maintenance Procedures	№	R	—
6.2.9		Operating Procedures	№	R	—
6.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.3	PS 1 - 17	Disinfection: Scales			
6.3.1		Equipment Condition Assessment	№	R	—
6.3.2		Equipment Specifications Development	№	R	—
6.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.3.8		Maintenance Procedures	№	R	—
6.3.9		Operating Procedures	№	R	—
6.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.4	PS 1 - 17	Disinfection: Filters			
6.4.1		Equipment Condition Assessment	№	R	—
6.4.2		Equipment Specifications Development	№	R	—
6.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.4.8		Maintenance Procedures	№	R	—
6.4.9		Operating Procedures	№	R	—
6.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.5	PS 1 - 17	Disinfection: Ejectors			
6.5.1		Equipment Condition Assessment	№	R	—
6.5.2		Equipment Specifications Development	№	R	—
6.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.5.8		Maintenance Procedures	№	R	—
6.5.9		Operating Procedures	№	R	—
6.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.6	PS 1 - 17	Disinfection: Pipework and Valves			
6.6.1		Equipment Condition Assessment	№	R	—
6.6.2		Equipment Specifications Development	№	R	—
6.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.6.8		Maintenance Procedures	№	R	—
6.6.9		Operating Procedures	№	R	—
6.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.7	PS 1 - 17	Disinfection: Extractor Fan			
6.7.1		Equipment Condition Assessment	№	R	—
6.7.2		Equipment Specifications Development	№	R	—
6.7.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.7.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.7.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.7.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.7.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.7.8		Maintenance Procedures	№	R	—
6.7.9		Operating Procedures	№	R	—
6.7.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.8	PS 1 - 17	Disinfection: Cables, Panels, and Instrumentation			
6.8.1		Equipment Condition Assessment	№	R	—
6.8.2		Equipment Specifications Development	№	R	—
6.8.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.8.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.8.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.8.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.8.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.8.8		Maintenance Procedures	№	R	—
6.8.9		Operating Procedures	№	R	—
6.8.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.9	PS 1 - 17	Disinfection: Lifting Equipment Crawl Beams			
6.9.1		Equipment Condition Assessment	№	R	—
6.9.2		Equipment Specifications Development	№	R	—
6.9.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.9.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.9.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.9.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.9.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.9.8		Maintenance Procedures	№	R	—
6.9.9		Operating Procedures	№	R	—
6.9.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.10	PS 1 - 17	Disinfection: Desludging Valves			
6.10.1		Equipment Condition Assessment	№	R	—
6.10.2		Equipment Specifications Development	№	R	—
6.10.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.10.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.10.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.10.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.10.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.10.8		Maintenance Procedures	№	R	—
6.10.9		Operating Procedures	№	R	—
6.10.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
6.11	PS 1 - 17	Disinfection: Pumps			
6.11.1		Equipment Condition Assessment	№	R	—
6.11.2		Equipment Specifications Development	№	R	—
6.11.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
6.11.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
6.11.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
6.11.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
6.11.7		Other Technical Recommendations (including long term planning factors)	№	R	—
6.11.8		Maintenance Procedures	№	R	—
6.11.9		Operating Procedures	№	R	—
6.11.10		Operating and Maintenance Budget (Recommendations)	№	R	—
<b>Sub-Total</b> (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 7	PS 1 - 17	Second Class Water		
7.1	PS 1 - 17	Second Class Water: Pumps		
7.1.1		Equipment Condition Assessment	№	R —
7.1.2		Equipment Specifications Development	№	R —
7.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
7.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
7.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
7.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
7.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
7.1.8		Maintenance Procedures	№	R —
7.1.9		Operating Procedures	№	R —
7.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
7.2	PS 1 - 17	Second Class Water: Filters			
7.2.1		Equipment Condition Assessment	№	R	—
7.2.2		Equipment Specifications Development	№	R	—
7.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
7.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
7.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
7.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
7.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
7.2.8		Maintenance Procedures	№	R	—
7.2.9		Operating Procedures	№	R	—
7.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
7.3	PS 1 - 17	Second Class Water: Cables, Panels, and Instrumentation			
7.3.1		Equipment Condition Assessment	№	R	—
7.3.2		Equipment Specifications Development	№	R	—
7.3.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
7.3.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
7.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
7.3.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
7.3.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
7.3.8		Maintenance Procedures	№	R	—
7.3.9		Operating Procedures	№	R	—
7.3.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
<b>Sub-Total</b> (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 8	PS 1 - 17	Sludge Thickening		
8.1	PS 1 - 17	Sludge Thickening: Gravity Thickeners		
8.1.1		Equipment Condition Assessment	№	R —
8.1.2		Equipment Specifications Development	№	R —
8.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
8.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
8.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
8.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
8.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
8.1.8		Maintenance Procedures	№	R —
8.1.9		Operating Procedures	№	R —
8.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
8.2	PS 1 - 17	Sludge Thickening: Bridge Motor			
8.2.1		Equipment Condition Assessment	№	R	—
8.2.2		Equipment Specifications Development	№	R	—
8.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
8.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
8.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
8.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
8.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
8.2.8		Maintenance Procedures	№	R	—
8.2.9		Operating Procedures	№	R	—
8.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
8.3	PS 1 - 17	Sludge Thickening: Bridge Framework			
8.3.1		Equipment Condition Assessment	№	R	—
8.3.2		Equipment Specifications Development	№	R	—
8.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
8.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
8.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
8.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
8.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
8.3.8		Maintenance Procedures	№	R	—
8.3.9		Operating Procedures	№	R	—
8.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
8.4	PS 1 - 17	Sludge Thickening: Grit Classifier			
8.4.1		Equipment Condition Assessment	№	R	—
8.4.2		Equipment Specifications Development	№	R	—
8.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
8.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
8.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
8.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
8.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
8.4.8		Maintenance Procedures	№	R	—
8.4.9		Operating Procedures	№	R	—
8.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
8.5	PS 1 - 17	Sludge Thickening: Cyclones			
8.5.1		Equipment Condition Assessment	№	R	—
8.5.2		Equipment Specifications Development	№	R	—
8.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
8.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
8.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
8.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
8.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
8.5.8		Maintenance Procedures	№	R	—
8.5.9		Operating Procedures	№	R	—
8.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
8.6	PS 1 - 17	Sludge Thickening: Screens			
8.6.1		Equipment Condition Assessment	№	R	—
8.6.2		Equipment Specifications Development	№	R	—
8.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
8.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
8.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
8.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
8.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
8.6.8		Maintenance Procedures	№	R	—
8.6.9		Operating Procedures	№	R	—
8.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
8.7	PS 1 - 17	Sludge Thickening: Pumps			
8.7.1		Equipment Condition Assessment	№	R	—
8.7.2		Equipment Specifications Development	№	R	—
8.7.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
8.7.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
8.7.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
8.7.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
8.7.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
8.7.8		Maintenance Procedures	№	R	—
8.7.9		Operating Procedures	№	R	—
8.7.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
8.8	PS 1 - 17	Sludge Thickening: Cables, Panels, and Instrumentation			
8.8.1		Equipment Condition Assessment	№	R	—
8.8.2		Equipment Specifications Development	№	R	—
8.8.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
8.8.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
8.8.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
8.8.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
8.8.7		Other Technical Recommendations (including long term planning factors)	№	R	—
8.8.8		Maintenance Procedures	№	R	—
8.8.9		Operating Procedures	№	R	—
8.8.10		Operating and Maintenance Budget (Recommendations)	№	R	—
<b>Sub-Total</b> (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 9	PS 1 - 17	Dissolved Air Floatation		
9.1	PS 1 - 17	Dissolved Air Floatation: WAS Pumps		
9.1.1		Equipment Condition Assessment	№	R —
9.1.2		Equipment Specifications Development	№	R —
9.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
9.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
9.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
9.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
9.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
9.1.8		Maintenance Procedures	№	R —
9.1.9		Operating Procedures	№	R —
9.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
9.2	PS 1 - 17	Dissolved Air Floatation: Compressors			
9.2.1		Equipment Condition Assessment	№	R	—
9.2.2		Equipment Specifications Development	№	R	—
9.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
9.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
9.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
9.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
9.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
9.2.8		Maintenance Procedures	№	R	—
9.2.9		Operating Procedures	№	R	—
9.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
9.4	PS 1 - 17	Dissolved Air Floatation: Bridge Gearbox			
9.4.1		Equipment Condition Assessment	№	R	—
9.4.2		Equipment Specifications Development	№	R	—
9.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
9.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
9.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
9.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
9.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
9.4.8		Maintenance Procedures	№	R	—
9.4.9		Operating Procedures	№	R	—
9.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
9.3	PS 1 - 17	Dissolved Air Floatation: Bridge Motor			
9.3.1		Equipment Condition Assessment	№	R	—
9.3.2		Equipment Specifications Development	№	R	—
9.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
9.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
9.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
9.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
9.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
9.3.8		Maintenance Procedures	№	R	—
9.3.9		Operating Procedures	№	R	—
9.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
9.5	PS 1 - 17	Dissolved Air Floatation: Saturation Tank			
9.5.1		Equipment Condition Assessment	№	R	—
9.5.2		Equipment Specifications Development	№	R	—
9.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
9.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
9.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
9.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
9.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
9.5.8		Maintenance Procedures	№	R	—
9.5.9		Operating Procedures	№	R	—
9.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
9.6	PS 1 - 17	Dissolved Air Floatation: Scrapers			
9.6.1		Equipment Condition Assessment	№	R	—
9.6.2		Equipment Specifications Development	№	R	—
9.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
9.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
9.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
9.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
9.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
9.6.8		Maintenance Procedures	№	R	—
9.6.9		Operating Procedures	№	R	—
9.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
9.7	PS 1 - 17	Dissolved Air Floatation: Cables, Panels, and Instrumentation			
9.7.1		Equipment Condition Assessment	№	R	—
9.7.2		Equipment Specifications Development	№	R	—
9.7.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
9.7.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
9.7.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
9.7.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
9.7.7		Other Technical Recommendations (including long term planning factors)	№	R	—
9.7.8		Maintenance Procedures	№	R	—
9.7.9		Operating Procedures	№	R	—
9.7.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Sub-Total (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 10	PS 1 - 17	Digestion		
10.1	PS 1 - 17	Primary Digestion: Feed Pumps		
10.1.1		Equipment Condition Assessment	№	R —
10.1.2		Equipment Specifications Development	№	R —
10.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
10.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
10.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
10.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
10.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
10.1.8		Maintenance Procedures	№	R —
10.1.9		Operating Procedures	№	R —
10.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.2	PS 1 - 17	Primary Digestion: Mixing Pumps or Mixers			
10.2.1		Equipment Condition Assessment	№	R	—
10.2.2		Equipment Specifications Development	№	R	—
10.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.2.8		Maintenance Procedures	№	R	—
10.2.9		Operating Procedures	№	R	—
10.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.3	PS 1 - 17	Primary Digestion: Recirculation Pumps			
10.3.1		Equipment Condition Assessment	№	R	—
10.3.2		Equipment Specifications Development	№	R	—
10.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.3.8		Maintenance Procedures	№	R	—
10.3.9		Operating Procedures	№	R	—
10.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.4	PS 1 - 17	Primary Digestion: Heat Exchange (HEX) or Boiler			
10.4.1		Equipment Condition Assessment	№	R	—
10.4.2		Equipment Specifications Development	№	R	—
10.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.4.8		Maintenance Procedures	№	R	—
10.4.9		Operating Procedures	№	R	—
10.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.5	PS 1 - 17	Primary Digestion: Burners			
10.5.1		Equipment Condition Assessment	№	R	—
10.5.2		Equipment Specifications Development	№	R	—
10.5.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.5.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.5.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.5.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.5.8		Maintenance Procedures	№	R	—
10.5.9		Operating Procedures	№	R	—
10.5.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.6	PS 1 - 17	Primary Digestion: Gas Holder			
10.6.1		Equipment Condition Assessment	№	R	—
10.6.2		Equipment Specifications Development	№	R	—
10.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.6.8		Maintenance Procedures	№	R	—
10.6.9		Operating Procedures	№	R	—
10.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.7	PS 1 - 17	Primary Digestion: Flare			
10.7.1		Equipment Condition Assessment	№	R	—
10.7.2		Equipment Specifications Development	№	R	—
10.7.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.7.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.7.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.7.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.7.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.7.8		Maintenance Procedures	№	R	—
10.7.9		Operating Procedures	№	R	—
10.7.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.8	PS 1 - 17	Primary Digestion: Pipework and Valves			
10.8.1		Equipment Condition Assessment	№	R	—
10.8.2		Equipment Specifications Development	№	R	—
10.8.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.8.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.8.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.8.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.8.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.8.8		Maintenance Procedures	№	R	—
10.8.9		Operating Procedures	№	R	—
10.8.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.9	PS 1 - 17	Primary Digestion: Cables, Panels, and Instrumentation			
10.9.1		Equipment Condition Assessment	№	R	—
10.9.2		Equipment Specifications Development	№	R	—
10.9.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.9.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.9.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.9.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.9.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.9.8		Maintenance Procedures	№	R	—
10.9.9		Operating Procedures	№	R	—
10.9.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.10	PS 1 - 17	Primary Digestion: Pressure Reducing Valves			
10.10.1		Equipment Condition Assessment	№	R	—
10.10.2		Equipment Specifications Development	№	R	—
10.10.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.10.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.10.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.10.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.10.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.10.8		Maintenance Procedures	№	R	—
10.10.9		Operating Procedures	№	R	—
10.10.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.11	PS 1 - 17	Primary Digestion: Water Traps			
10.11.1		Equipment Condition Assessment	№	R	—
10.11.2		Equipment Specifications Development	№	R	—
10.11.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.11.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.11.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.11.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.11.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.11.8		Maintenance Procedures	№	R	—
10.11.9		Operating Procedures	№	R	—
10.11.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.12	PS 1 - 17	Primary Digestion: Flame Arrestors			
10.12.1		Equipment Condition Assessment	№	R	—
10.12.2		Equipment Specifications Development	№	R	—
10.12.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
10.12.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
10.12.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.12.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
10.12.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
10.12.8		Maintenance Procedures	№	R	—
10.12.9		Operating Procedures	№	R	—
10.12.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.13	PS 1 - 17	Secondary Digestion: Feed Pumps			
10.13.1		Equipment Condition Assessment	№	R	—
10.13.2		Equipment Specifications Development	№	R	—
10.13.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
10.13.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
10.13.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.13.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
10.13.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
10.13.8		Maintenance Procedures	№	R	—
10.13.9		Operating Procedures	№	R	—
10.13.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.14	PS 1 - 17	Secondary Digestion: Scraper			
10.14.1		Equipment Condition Assessment	№	R	—
10.14.2		Equipment Specifications Development	№	R	—
10.14.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.14.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.14.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.14.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.14.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.14.8		Maintenance Procedures	№	R	—
10.14.9		Operating Procedures	№	R	—
10.14.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.15	PS 1 - 17	Secondary Digestion: Motor			
10.15.1		Equipment Condition Assessment	№	R	—
10.15.2		Equipment Specifications Development	№	R	—
10.15.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.15.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.15.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.15.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.15.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.15.8		Maintenance Procedures	№	R	—
10.15.9		Operating Procedures	№	R	—
10.15.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
10.16	PS 1 - 17	Secondary Digestion: Cables, Panels, and Instrumentation			
10.16.1		Equipment Condition Assessment	№	R	—
10.16.2		Equipment Specifications Development	№	R	—
10.16.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
10.16.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
10.16.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
10.16.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
10.16.7		Other Technical Recommendations (including long term planning factors)	№	R	—
10.16.8		Maintenance Procedures	№	R	—
10.16.9		Operating Procedures	№	R	—
10.16.10		Operating and Maintenance Budget (Recommendations)	№	R	—
<b>Sub-Total</b> (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 11	PS 1 – 17	Dewatering		
11.1	PS 1 - 17	Dewatering Units		
11.1.1		Equipment Condition Assessment	№	R —
11.1.2		Equipment Specifications Development	№	R —
11.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
11.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
11.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
11.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
11.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
11.1.8		Maintenance Procedures	№	R —
11.1.9		Operating Procedures	№	R —
11.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.2	PS 1 - 17	Dewatering: Feed Pumps			
11.2.1		Equipment Condition Assessment	№	R	—
11.2.2		Equipment Specifications Development	№	R	—
11.2.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
11.2.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
11.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.2.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
11.2.7		Other Technical Recommendations (including long term planning factors)	№	R	—
11.2.8		Maintenance Procedures	№	R	—
11.2.9		Operating Procedures	№	R	—
11.2.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.3	PS 1 - 17	Dewatering: Filtrate Pumps			
11.3.1		Equipment Condition Assessment	№	R	—
11.3.2		Equipment Specifications Development	№	R	—
11.3.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
11.3.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
11.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.3.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
11.3.7		Other Technical Recommendations (including long term planning factors)	№	R	—
11.3.8		Maintenance Procedures	№	R	—
11.3.9		Operating Procedures	№	R	—
11.3.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—



Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.4	PS 1 - 17	Dewatering: Cake Pumps			
11.4.1		Equipment Condition Assessment	№	R	—
11.4.2		Equipment Specifications Development	№	R	—
11.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
11.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
11.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.4.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
11.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
11.4.8		Maintenance Procedures	№	R	—
11.4.9		Operating Procedures	№	R	—
11.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.5	PS 1 - 17	Dewatering: Sludge Cake Conveyor			
11.5.1		Equipment Condition Assessment	№	R	—
11.5.2		Equipment Specifications Development	№	R	—
11.5.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
11.5.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
11.5.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.5.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
11.5.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
11.5.8		Maintenance Procedures	№	R	—
11.5.9		Operating Procedures	№	R	—
11.5.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.6	PS 1 - 17	Dewatering: Conveyor Motor			
11.6.1		Equipment Condition Assessment	№	R	—
11.6.2		Equipment Specifications Development	№	R	—
11.6.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
11.6.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
11.6.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.6.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
11.6.7		Other Technical Recommendations (including long term planning factors)	№	R	—
11.6.8		Maintenance Procedures	№	R	—
11.6.9		Operating Procedures	№	R	—
11.6.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.7	PS 1 - 17	Dewatering: Conveyor Gearbox			
11.7.1		Equipment Condition Assessment	№	R	—
11.7.2		Equipment Specifications Development	№	R	—
11.7.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
11.7.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
11.7.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.7.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
11.7.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
11.7.8		Maintenance Procedures	№	R	—
11.7.9		Operating Procedures	№	R	—
11.7.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.8	PS 1 - 17	Dewatering: Poly Mixers			
11.8.1		Equipment Condition Assessment	№	R	—
11.8.2		Equipment Specifications Development	№	R	—
11.8.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
11.8.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
11.8.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.8.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
11.8.7		Other Technical Recommendations (including long term planning factors)	№	R	—
11.8.8		Maintenance Procedures	№	R	—
11.8.9		Operating Procedures	№	R	—
11.8.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.9	PS 1 - 17	Dewatering: Poly Feed Pumps			
11.9.1		Equipment Condition Assessment	№	R	—
11.9.2		Equipment Specifications Development	№	R	—
11.9.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
11.9.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
11.9.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.9.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
11.9.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
11.9.8		Maintenance Procedures	№	R	—
11.9.9		Operating Procedures	№	R	—
11.9.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
11.10	PS 1 - 17	Dewatering: Cables, Panels, and Instrumentation			
11.10.1		Equipment Condition Assessment	№	R	—
11.10.2		Equipment Specifications Development	№	R	—
11.10.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
11.10.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
11.10.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
11.10.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
11.10.7		Other Technical Recommendations (including long term planning factors)	№	R	—
11.10.8		Maintenance Procedures	№	R	—
11.10.9		Operating Procedures	№	R	—
11.10.10		Operating and Maintenance Budget (Recommendations)	№	R	—
<b>Sub-Total</b> (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 12	PS 1 – 17	Drying		
12.1	PS 1 - 17	Drying: Drying Bed Filtrate Pump		
12.1.1		Equipment Condition Assessment	№	R —
12.1.2		Equipment Specifications Development	№	R —
12.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
12.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
12.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
12.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
12.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
12.1.8		Maintenance Procedures	№	R —
12.1.9		Operating Procedures	№	R —
12.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
<b>Sub-Total</b> (transferred sub-total to Page 176)				R —



Item №	Payment Reference	Description	Unit	Rate
Part 13	PS 1 - 17	Maturation Ponds		
13.1	PS 1 - 17	Maturation Ponds		
13.1.1		Equipment Condition Assessment	№	R —
13.1.2		Equipment Specifications Development	№	R —
13.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
13.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
13.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
13.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
13.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
13.1.8		Maintenance Procedures	№	R —
13.1.9		Operating Procedures	№	R —
13.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
<b>Sub-Total</b> (transferred sub-total to Page 176)			R	—

Item №	Payment Reference	Description	Unit	Rate
Part 14	PS 1 - 17	Whole Treatment Works		
14.1	PS 1 - 17	Whole Treatment Works: Motor Control Centre		
14.1.1		Equipment Condition Assessment	№	R —
14.1.2		Equipment Specifications Development	№	R —
14.1.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R —
14.1.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R —
14.1.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R —
14.1.6		Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R —
14.1.7		Other Technical Recommendations (including long term planning factors)	№	R —
14.1.8		Maintenance Procedures	№	R —
14.1.9		Operating Procedures	№	R —
14.1.10		Operating and Maintenance Budget (Recommendations)	№	R —
Balance to be taken Forward			R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
14.2	PS 1 – 17	Whole Treatment Works: Automation			
14.2.1		Equipment Condition Assessment	№	R	—
14.2.2		Equipment Specifications Development	№	R	—
14.2.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
14.2.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
14.2.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
14.2.6		Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
14.2.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
14.2.8		Maintenance Procedures	№	R	—
14.2.9		Operating Procedures	№	R	—
14.2.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
14.3	PS 1 - 17	Whole Treatment Works: Security			
14.3.1		Site and Equipment Condition Assessment	№	R	—
14.3.2		Site and Equipment Specifications Development	№	R	—
14.3.3		Equipment Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
14.3.4		Equipment Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
14.3.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
14.3.6		Site and Equipment Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
14.3.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
14.3.8		Maintenance Procedures	№	R	—
14.3.9		Operating Procedures	№	R	—
14.3.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
14.4	PS 1 - 17	Whole Treatment Works: Environmental Management Recommendations			
14.4.1		Site and Equipment Condition Assessment	№	R	—
14.4.2		Site and Equipment Specifications Development	№	R	—
14.4.3		Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training)	№	R	—
14.4.4		Equipment Refurbishment Value Calculation (inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)	№	R	—
14.4.5		Equipment Factory Testing Certificate Quality Criteria and Performance Indices	№	R	—
14.4.6		Site and Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies)	№	R	—
14.4.7		Other Technical Recommendations (including long term planning factors)	№	R	—
14.4.8		Maintenance Procedures	№	R	—
14.4.9		Operating Procedures	№	R	—
14.4.10		Operating and Maintenance Budget (Recommendations)	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
14.5	PS 1 - 17	Whole Treatment Works: Building and Civil Infrastructure and General House Keeping			
14.5.1		Site and Infrastructure Condition Assessment	№	R	—
14.5.2		Site and Infrastructure Specifications Development	№	R	—
14.5.3		Infrastructure Replacement Value Calculation <i>(inclusive of construction, supply, delivery, factory testing, installation, commission, training)</i>	№	R	—
14.5.4		Infrastructure Refurbishment Value Calculation <i>(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)</i>	№	R	—
14.5.6		Infrastructure Dependencies <i>(inclusive of installation dependencies and commissioning dependencies)</i>	№	R	—
14.5.7		Other Technical Recommendations <i>(including long term planning factors)</i>	№	R	—
14.5.8		Maintenance Procedures	№	R	—
14.5.9		Operating Procedures	№	R	—
14.5.10		Operating and Maintenance Budget <i>(Recommendations)</i>	№	R	—
Balance to be taken Forward				R	—

Balance brought Forward				R	—
Item №	Payment Reference	Description	Unit	Rate	
14.6	PS 1 - 17	Whole Treatment Works: Organogram Optimisation and Training Recommendations			
14.6.1		Organogram and Training Assessment	№	R	—
14.6.2		Organogram and Training Specifications Development	№	R	—
14.6.3		Organogram and Training Value/Budget Calculation ( <i>inclusive of mandatory and non-mandatory</i> )	№	R	—
14.6.4		Other Technical Recommendations ( <i>including long term planning factors</i> )	№	R	—
<b><u>Sub-Total</u></b> (transferred sub-total to Page 176)				R	—

Item №	Payment Reference	Description	Unit	Rate
Part 15	PS 1 - 17	Disbursements		
15.1		Typing of Documents and Reports	№	R —
15.2		Photocopying/Printing: Black and White	№	R —
15.3		Photocopying/Printing: Colour	№	R —
15.4		Binding Documents	№	R —
15.5		Travelling by means of a private motor vehicle	№	R —
Sub-Total (transferred sub-total to Page 176)				R —

Item №	Payment Reference	Description	Unit	Rate
Part 16	PS 1 - 17	Wastewater Treatment Alternative Options		
16.1	PS 1 - 17	Energy: Feasibility of Solar Plant		
16.1.1		Site and Infrastructure Condition Assessment (Recommendations)	№	R —
16.1.2		Determine Energy Requirement of Plant (Recommendations)	№	R —
16.1.3		Propose Infrastructure to meet Requirement (Recommendations)	№	R —
16.1.4		Cost Analysis (Recommendations)	№	R —
16.1.5		Operating and Maintenance Plan (Recommendations)	№	R —
16.1.6		Operating and Maintenance Budget (Recommendations)	№	R —
16.2	PS 1 - 17	Process: Feasibility of Alternative Biotreatment Processes		
16.2.1		Test Current Effluent	№	R —
16.2.2		Establish Suitability of Current Effluent treatment for existing Wastewater Infrastructure	№	R —
16.2.3		Investigate Purification of Effluent Discharge with respect to legislative standard and special requirements	№	R —
16.2.4		Report with Recommendations of proposed changes to system	№	R —
16.2.5		Cost Estimate	№	R —
<b>Sub-Total</b> (transferred sub-total to Page 176)				R —



Item No	Payment Reference	Description	Unit	Rate
Part 17	PS 1 - 17	Wastewater Treatment Tests		
17.1		Total Nitrogen	Sample	R —
17.2		Total Phosphorus	Sample	R —
17.3		Ph and Electrical Conductivity	Sample	R —
17.4		E. coli and Coliforms	Sample	R —
17.5		Helminths	Sample	R —
17.6		Influent COD	Sample	R —
17.7		Influent TKN	Sample	R —
17.8		Total Suspended Solids	Sample	R —
17.9		Settleable Solids	Sample	R —
17.10		Non-Settleable Solids	Sample	R —
17.11		Minimum Temperature	Sample	R —
17.12		Maximum Temperature	Sample	R —
17.13		Alkalinity	Sample	R —
<b>Sub-Total</b> (transferred sub-total to Page 176)			R	—

Summary of Bill of Quantities			
Part One	Professional Services	R	–
Part Two	Preliminary Treatment	R	–
Part Three	Primary Treatment	R	–
Part Four	Biological Treatment	R	–
Part Five	Secondary Treatment	R	–
Part Six	Disinfection	R	–
Part Seven	Second Class Water	R	–
Part Eight	Sludge Thickening	R	–
Part Nine	Dissolved Air Floatation	R	–
Part Ten	Digestion	R	–
Part Eleven	Dewatering	R	–
Part Twelve	Drying	R	–
Part Thirteen	Maturation Ponds	R	–
Part Fourteen	Whole Treatment Works	R	–
Part Fifteen	Disbursements	R	–
Part Sixteen	Wastewater Treatment Tests	R	–
Part Seventeen	Wastewater Treatment Alternative Options	R	–
<b>Final Total</b> (Carried forward to Form of Offer – Page 70)		R	–

*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:**

## **PART C3 : SCOPE OF WORK**

### **C3.1 BACKGROUND**

The Sanitation Operations Department of the eThekweni Municipality, Water and Sanitation Unit services an area of approximately 2300 km<sup>2</sup>, providing water-borne sanitation through a network infrastructure made up of approximately  $\pm 7\,800$  km of gravity sewer pipeline,  $\pm 120$  km of pressurised sewer pipeline, 650 km of trunk sewer pipeline,  $\pm 300\,000$  manholes, 27 wastewater treatment works and  $\pm 280$  remotes sites (pump stations, siphons, silt-traps and penstocks); in addition, provides on-site sanitation through a series of infrastructure made up of alternative sanitation.

Between the 8th to 11th of April 2022, South African Weather Services (SAWS) issued an early warning of heavy rainfall that could cause severe damage to property and flooding. From the 8th of April 2022 rainfall recorded between 200mm to 400mm which resulting in disruptive rainfall being experienced in mostly all regions of the Municipality. The damages encountered affected public infrastructure, that include houses, roads, storm water drainage, retaining walls etc. Disaster Management officials were deployed from 08th, to conduct initial and impact assessments of the damages, prioritizing communities, areas that are high risk and critical infrastructure. Other contracts within the City were utilised to assist with some of the damage sewer infrastructure, but the magnitude of damage and several delays (authority, funds, etc.) have created an environment which requires urgent work at the 27 Wastewater Treatment Works.

### **C3.2 EMPLOYER'S OBJECTIVES**

The Employer's objective is to appoint a consultant to undertake the development of an investment strategy at the 27 Sanitation Operation Department wastewater treatment works, namely:

<b>Nº</b>	<b>Treatment Works Name</b>	<b>Nº</b>	<b>Treatment Works Name</b>
1	Tongaat Wastewater Treatment Works	15	Hammarisdale Wastewater Treatment Works
2	Genazzano Wastewater Treatment Works	16	Kwandengezi Wastewater Treatment Works
3	Umdloti Wastewater Treatment Works	17	Hillcrest Wastewater Treatment Works
4	Verulam Wastewater Treatment Works	18	Glenwood Wastewater Treatment Works
5	Umhlanga Wastewater Treatment Works	19	Fredville Wastewater Treatment Works
6	Phoenix Wastewater Treatment Works	20	Dassenhoek Wastewater Treatment Works
7	Kwamashu Wastewater Treatment Works	21	Cato Ridge Wastewater Treatment Works
8	Northern Wastewater Treatment Works	22	Mpumalanga Wastewater Treatment Works
9	New Germany Wastewater Treatment Works	23	Amanzimtoti Wastewater Treatment Works
10	Umbilo Wastewater Treatment Works	24	Kingsburgh Wastewater Treatment Works
11	Umhlatuzana Wastewater Treatment Works	25	Craigieburn Wastewater Treatment Works
12	Central Wastewater Treatment Works	26	Magabeni Wastewater Treatment Works
13	Southern Wastewater Treatment Works	27	Umkomaas Wastewater Treatment Works
14	Isipingo Wastewater Treatment Works		

The outcomes will be utilized to understand the requirements at each of the 27 wastewater treatment works and appropriately action the required undertakings needed to meet/exceed the City's needs and future plans.

### C3.3 Description of Site and Access

The Description of Site and Access for the respective wastewater treatment works are:

1. Tongaat Wastewater Treatment Works

The Tongaat Wastewater Treatment Works is situated within the Northern region of eThekweni Municipality (X Coordinate: 31,13922679330; Y Coordinate -29,55851057760). The plant is an extended aeration activated sludge plant located in the Tongaat area.

2. Genazzano Wastewater Treatment Works

The Genazzano Wastewater Treatment Works is situated within the Northern region of eThekweni Municipality (X Coordinate: 31,15712175560; Y Coordinate -29,60809640210). The plant is an extended aeration activated sludge plant located in the Westbrook area.

3. Umdloti Wastewater Treatment Works

The Umdloti Wastewater Treatment Works is situated within the Northern region of eThekweni Municipality (X Coordinate: 31,10967888810; Y Coordinate -29,65091184430). The plant is an extended aeration activated sludge plant located in the Umdloti area.

4. Verulam Wastewater Treatment Works

The Verulam Wastewater Treatment Works is situated within the Northern region of eThekweni Municipality (X Coordinate: 31,06349530890; Y Coordinate -29,64610908360). The plant is a conventional aeration activated sludge plant with digestion located in the Riyadh area.

5. Umhlanga Wastewater Treatment Works

The Umhlanga Wastewater Treatment Works is situated within the Northern region of eThekweni Municipality (X Coordinate: 31,08052631320; Y Coordinate -29,69790450140). The plant is an extended aeration activated sludge plant located in the Umhlanga area.

6. Phoenix Wastewater Treatment Works

The Phoenix Wastewater Treatment Works is situated within the Northern region of eThekweni Municipality (X Coordinate: 31,03576746380; Y Coordinate -29,67779287420). The plant is a conventional aeration activated sludge plant with Digestion located in the Ottawa area.

7. KwaMashu Wastewater Treatment Works

The KwaMashu Wastewater Treatment Works is situated within the Northern region of eThekweni Municipality (X Coordinate: 31,01170338970; Y Coordinate -29,72787127760). The plant is a conventional aeration activated sludge plant with digestion located in the Phoenix area.

8. Northern Wastewater Treatment Works

The Northern Wastewater Treatment Works is situated within the Central region of eThekweni Municipality (X Coordinate: 30,99619188300; Y Coordinate -29,79636171590). The plant is a conventional activated sludge plant with digestion located in the Sea Cow Lake area.

9. New Germany Wastewater Treatment Works

The New Germany Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,89589881170; Y Coordinate -29,80590177590). The plant is a conventional activated sludge plant located in the New Germany area.

10. Umbilo Wastewater Treatment Works

The Umbilo Wastewater Treatment Works is situated within the Central region of eThekweni Municipality (X Coordinate: 30,88902894280; Y Coordinate -29,84461971810). The plant is a combination conventional activated sludge and biofiltration plant located in the Sarnia area.

11. Umhlatuzana Wastewater Treatment Works

The Umhlatuzana Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,88397414550; Y Coordinate -29,87911261810). The plant is an extended aeration activated sludge plant located in the Shallcross area.

12. Central Wastewater Treatment Works

The Central Wastewater Treatment Works is situated within the Central region of eThekweni Municipality (X Coordinate: 31,05670043550; Y Coordinate -29,88061281760). The plant is one of two Sea Outfalls and is located in the southern breakwater of the harbour.

13. Southern Wastewater Treatment Works

The Southern Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,97438348560; Y Coordinate -29,95383608620). The plant is the second sea outfall located in the Merewent area.

14. Isipingo Wastewater Treatment Works

The Isipingo Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,90606133300; Y Coordinate -29,99213431200). The plant is a biofiltration plant located in the Isipingo area.

15. Hammarsdale Wastewater Treatment Works

The Hammarsdale Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,66189609940; Y Coordinate -29,79978141240). The plant is an extended aeration activated sludge plant located in the Hammarsdale area.

16. KwaNdengezi Wastewater Treatment Works

The KwaNdengezi Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,76727580700; Y Coordinate -29,86810285960). The plant is a biofiltration plant located in the KwaNdengezi area.

17. Hillcrest Wastewater Treatment Works

The Hillcrest Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,75607395540; Y Coordinate -29,79377001510). The plant is an extended aeration activated sludge plant located in the Hillcrest area.

18. Glenwood Wastewater Treatment Works

The Hillcrest Wastewater Treatment Works is situated within the Western region of eThekweni Municipality. The plant rotating biological contactor plant located in the Kloof area.

19. Fredville Wastewater Treatment Works

The Fredville Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,66842614180; Y Coordinate -29,69386906890). The plant is an extended aeration activated sludge plant located in the Fredville area.

20. Dassenhoek Wastewater Treatment Works

The Dassenhoek Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,79413362420; Y Coordinate 0,00000000000). The plant is an extended aeration activated sludge plant located in the Dassenhoek area.

21. Cato Ridge Wastewater Treatment Works

The Cato Ridge Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,59812780560; Y Coordinate -29,75784561580). The plant is an oxidation pond located in the Cato Ridge area.

22. Mpumalanga Wastewater Treatment Works

The Mpumalanga Wastewater Treatment Works is situated within the Western region of eThekweni Municipality (X Coordinate: 30,59164834760; Y Coordinate -29,80347682240). The plant is a Biofiltration plant located in the Mpumalanga area.

23. Amanzimtoti Wastewater Treatment Works

The Amanzimtoti Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,91877297000; Y Coordinate -30,00689150480). The plant receives a mixture of industrial and domestic effluents located in the Amanzimtoti area.

24. Kingsburgh Wastewater Treatment Works

The Kingsburgh Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,85653897500; Y Coordinate -30,07570679300). The plant is an extended aeration activated sludge plant located in the Kingsburgh area.

25. Craigieburn Wastewater Treatment Works

The Craigieburn Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,75200976870; Y Coordinate -30,20806198160). The plant is an extended aeration activated sludge plant located in the Craigieburn area.

26. Magabeni Wastewater Treatment Works

The Magabeni Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,78214705440; Y Coordinate -30,16742879980). The plant is an extended aeration activated sludge plant located in the Magabeni area.

## 27. Umkomaas Wastewater Treatment Works

The Umkomaas Wastewater Treatment Works is situated within the Southern region of eThekweni Municipality (X Coordinate: 30,79328058130; Y Coordinate -30,20307459070. The plant is an extended aeration activated sludge plant located in the Umkomaas area.

### C3.4 Project Duration

The Provision of Professional Multi-disciplinary Engineering Consulting Services for the development of the Investment Strategy of Wastewater Treatment Works, as and when require, for a period of 18 months.

### C3.5 Summary of Scope of Work

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

- a. Planning and investigations
- b. Studies and assessments (specifications and audits)
- c. Create work packages (renew or refurbishments)
- d. Prioritisation (work packages and/or treatment works)
- e. Client liaison and stakeholder engagement (including meetings)
- f. Preparation of reports

The following Reports must be prepared for the 13 Wastewater Treatment Works:

1. Equipment Condition Assessment
  2. Equipment Specifications Development
  3. Equipment Replacement Value Calculation  
(inclusive of construction, supply, delivery, factory testing, installation, commission, training)
  4. Equipment Refurbishment Value Calculation  
(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)
  5. Equipment Factory Testing Certificate Quality Criteria and Performance Indices
  6. Equipment Dependencies  
(inclusive of installation dependencies and commissioning dependencies)
  7. Other Technical Recommendations  
(including long term planning factors)
  8. Maintenance Procedures
  9. Operating Procedures
  10. Operating and Maintenance Budget Recommendations
  11. Human Resource Recommendations
  12. Environmental Management Recommendations
  13. Any other report deemed necessary
- g. Additional Studies and assessments

**Note:** 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.

### C3.6 Project Specifications

- PS 1      Equipment Condition Assessment
- The Consultant will be required to undertake a comprehensive and complete Condition Assessment of all equipment associated with the Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff for any clarification that may be required for the condition assessment of the equipment to be correct and accurate at the specified Treatment Works site.
- PS 2      Equipment Specifications Development
- The Consultant will be required to undertake a comprehensive Specifications Development of all equipment associated with the Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff and the Original Equipment Manufacturer for any clarification that may be required for the specification development to be correct and accurate at the specified Treatment Works site.
- PS 3      Equipment Replacement Value Calculation  
*(inclusive of construction, supply, delivery, factory testing, installation, commission, training)*
- The Consultant will be required to provide a detailed Equipment Replacement Value Calculation inclusive of construction, supply, delivery, factory testing, installation, commissioning and training for the Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment.
- The Consultant will be required to consult with the Municipality staff and the Original Equipment Manufacturer for any clarification that may be required for the Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training) to be correct and accurate at the specified Treatment Works site.
- PS 4      Equipment Refurbishment Value Calculation  
*(inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training)*
- The Consultant will be required to provide a detailed Equipment Refurbishment Value Calculation inclusive of Labour, Materials, Machining, Factory Testing, Installation, Commission, Training for the Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff and the Original Equipment Manufacturer for any clarification that may be required for the Equipment Replacement Value Calculation (inclusive of construction, supply, delivery, factory testing, installation, commission, training) to be correct and accurate at the specified Treatment Works site.



- PS 5      Equipment Factory Testing Certificate Quality Criteria and Performance Indices
- The Consultant will be required to provide the Factory Testing Certificate Quality Criteria and Performance Indices for all equipment that may require such. The Consultant will be required to consult with the Original Equipment Manufacturer for relevant Equipment Factory Testing Certificate Quality Criteria and Performance Indices at the specified Treatment Works site.
- PS 6      Equipment Dependencies  
*(inclusive of installation dependencies and commissioning dependencies)*
- The Consultant will be required to provide a detailed Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies) for the Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff and the Original Equipment Manufacturer for any clarification that may be required for the Equipment Dependencies (inclusive of installation dependencies and commissioning dependencies) to be correct and accurate at the specified Treatment Works site.
- PS 7      Other Technical Recommendations  
*(including long term planning factors)*
- The Consultant will be required to provide Other Technical Recommendations (including long term planning factors) for the specific Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff, other Service Providers and the Original Equipment Manufacturer for any clarification that may be required for the Other Technical Recommendations (including long term planning factors) to be considered at a specified Treatment Works site.
- PS 8      Maintenance Procedures
- The Consultant will be required to provide a detailed Maintenance Procedure for the Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff and the Original Equipment Manufacturer for any clarification that may be required for the Maintenance Procedures to be correct and accurate at the specified Treatment Works site.
- PS 9      Operating Procedures
- The Consultant will be required to provide a detailed Operating Procedures for the specific Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff and the Original Equipment Manufacturer for any clarification that may be required for the Operating Procedures to be correct and accurate at the specified Treatment Works site.

- PS 10      **Operating and Maintenance Budget Recommendations**  
The Consultant will be required to provide a detailed Operating and Maintenance Budget Recommendation for the specific Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff for any clarification that may be required for the Operating and Maintenance Budget Recommendations to be correct and accurate at the specified Treatment Works site.
- PS 11      **Human Resource Recommendations**  
The Consultant will be required to provide a detailed Human Resource Recommendation for the specific Wastewater Treatment Works operation and functionality inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff for any clarification that may be required for the Human Resource Recommendations to be correct and accurate at the specified Treatment Works site.
- PS 12      **Environmental Management Recommendations**  
The Consultant will be required to provide a detailed Environmental Management Recommendation for each of the specified Wastewater Treatment Works inclusive of all relevant and respective Professional staff, resources and equipment. The Consultant will be required to consult with the Municipality staff and the Relevant Environment Authorities for any clarification that may be required for the Environmental Management Recommendation to be correct and accurate at the specified Treatment Works site.
- PS 13      **Assessment of Buildings and Civil Infrastructure**  
Each Wastewater Treatment Works buildings and civil infrastructure including wet/dry tanks will be assessed, and various component items documented. This will include visual assessment and an ultrasonic scan if required. Assets specifically identified in the terms of reference are but not limited to:
- Structural steel supports
  - Building infrastructure such as work platforms, decks, walkways and handrails, staircases, and ladders.
  - Supports for lifting devices (load beams) and fall protection systems.
  - Structural integrity of buildings and roofs.
  - Concrete structures and foundations for dry and wet tanks, administration buildings
  - Access roads
- PS 14      **Security Management**  
Each Wastewater Treatment Works area will be assessed, and various component items documented. This will include visual assessment and historical data. Items specifically identified in the terms of reference are but not limited to: security fencing, remote security monitoring systems, armed response, guarding and access gates

- PS 15      Assessment of General House Keeping
- Each Wastewater Treatment Works Area will be assessed, and various component items documented. This will include visual assessment with photographic evidence and historical data. Items specifically identified in the terms of reference are but not limited to: grass cutting, pest control and odour control
- PS 16      Wastewater Treatment Tests
- The tenderer will be required to undertake the tests listed below, as and when required:
1. Total Nitrogen
  2. Total Phosphorus
  3. Ph and Electrical Conductivity
  4. E. coli and Coliforms
  5. Helminths
  6. Influent COD
  7. Influent TKN
  8. Total Suspended Solids
  9. Settleable Solids
  10. Non-Settleable Solids
  11. Minimum Temperature
  12. Maximum Temperature
  13. Alkalinity
- PS 17      Wastewater Treatment Alternative Options
- The tenderer is to provide alternative feasible options/solutions, with reference to the energy and process within the wastewater treatment works.

### **C3.3 ANNEXURES**

- 1. STANDARD CONDITIONS OF TENDER**
- 2. CIDB STANDARD PROFESSIONAL SERVICES OF CONTRACT**

**Annex F**  
(normative)

**Standard Conditions of Tender**

**F.1 General**

**F.1.1 Actions**

**F.1.1.1** The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

**F.1.1.2** The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

*Note:*

- 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that erodes more confidence in the ability of that person to act properly in his or her position even if no improper acts result.
- 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

**F.1.1.3** The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

**F.1.2 Tender Documents**

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

**F.1.3 Interpretation**

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

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

**F.1.3.3** For the purposes of these conditions of tender, the following definitions apply:

- a) **conflict of interest** means any situation in which:
- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially;
  - ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or

---

## **STANDARD PROFESSIONAL SERVICES CONTRACT**

**(July 2009)**  
**(Third Edition of CIDB document 1014)**

---



Construction Industry Development Board  
Pretoria  
Tel: 012 343 7136 or 012 481 9030  
Fax: 012 343 7153  
E-mail: [cidb@cidb.org.za](mailto:cidb@cidb.org.za)

July, 2009: Edition 3 of CIDB document 1015

Standard Professional Services Contract

# **The End**

**of the**

## **Professional Service Contract Document**

The Provision of Professional Multi-disciplinary Engineering Consulting Services for the development of the Investment Strategy of Wastewater Treatment Works, as and when require, for a period of 24 months