



CLUSTER
Trading Services

UNIT
Water and Sanitation

DEPARTMENT
Water and Sanitation Engineering

PROCUREMENT DOCUMENT
INFRASTRUCTURE

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-7780](#)

Contract Title: [Southern Wastewater Treatment Works: Concrete Rehabilitation of the Low-Level Storage Tank 1 and Construction of an Electrical Substation and Meter Room](#)

Est. CIDB Grade/ Class: [7 CE](#)

CLARIFICATION MEETING AND QUERIES

Clarification Meeting: [Compulsory Clarification Meeting](#)

Meeting Location, Date, Time: [Southern Wastewater Treatment Works, Administration Building, \(co-ordinates -29.955135360820552, 30.97299685576011\) on Tuesday, 22 February 2024 at 10h00](#)

Queries can be addressed to: [V. Naidoo](#)
The Employer's Agent's Representative: [Tel: 071-855-8175](#)
[eMail: visva.naidoo@durban.gov.za](#)
[email queries to be submitted by 07 March 2024 and consolidated question and answers will be uploaded on 14 March 2024](#)

TENDER SUBMISSION

Delivery Location: [The Tender Box in the foyer of the Municipal Building 166 KE Masinga Road, Durban](#)

Closing Date/ Time: [Friday, 22 March 2024](#) at [11h00](#)

FACSIMILE, eMAIL, or POSTED TENDERS WILL NOT BE ACCEPTED

Issued by:

ETHEKWINI MUNICIPALITY

Deputy Head: [Water and Sanitation Engineering](#)

Date of Issue: [16/02/2024](#)

Document Version 24/02/2023(c)

FOR OFFICIAL USE ONLY

Tenderer Name:		VAT Registered: Yes	No
Submitted: R	R	R	R
Corrected: R	R	R	R

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PART T1: TENDERING PROCEDURES**T1.1.1: TENDER NOTICE AND INVITATION TO TENDER**

Tenders are hereby invited for the **Concrete Rehabilitation of the Low-Level Storage Tank 1 and Construction of an electrical Substation and Meter Room at the Southern Wastewater Treatment Works**

Subject	Description	Tender Data Ref.
Employer	The Employer is the eThekweni Municipality as represented by: Deputy Head: Water and Sanitation Engineering	F.1.1.1
Tender Documents	Documents can only be obtained in electronic format, issued by the eThekweni Municipality. Documentation can be downloaded from the National Treasury's eTenders website or the eThekweni Municipality's Website . The <u>entire document</u> should be printed (on A4 paper) and suitably bound by the tenderer.	F.1.2
Eligibility	It is <u>estimated</u> that tenderers should have a CIDB contractor grading designation of 7 CE (or higher). The CIDB provisions in relation to a Contractor's Potentially Emerging (PE) status <u>do not</u> apply.	F.2.1.1
Clarification Meeting	Southern Wastewater Treatment Works, Administration Building, (co-ordinates -29.955135360820552, 30.97299685576011) on Tuesday, 22 February 2024 at 10h00	F.2.7
Seek Clarification	Queries relating to these documents are to be addressed to the Employer's Agent's Representative whose contact details are: V. Naidoo Tel: 071-855-8175 eMail: visva.naidoo@durban.gov.za email queries to be submitted by 07 March 2024 and consolidated question and answers will be uploaded on 14 March 2024	F.2.8
Submitting a Tender Offer	Tender offers shall be delivered to: The Tender Box in the foyer of the Municipal Building 166 KE Masinga Road, Durban	F.2.13
Closing Time	Tender offers shall be delivered on or before Friday, 22 March 2024 at or before 11h00 .	F.2.15
Evaluation of Tender Offers	The 80/20 Price Preference Point System, as specified in the PPPFA Regulations 2022 will be applied in the evaluation of tenders. Refer to Clause F.3.11 of the Tender Data for the Specific Goal(S) for the awarding of Preference Points, and other related evaluation requirements.	F.3.11

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

PART T1: TENDERING PROCEDURES

T1.2: TENDER DATA

T1.2.1 STANDARD CONDITIONS OF TENDER

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

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: [Water and Sanitation Engineering](#)

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

- 1) This procurement document.
- 2) "General Conditions of Contract for Construction Works – 3rd Edition 2015" issued by the South African Institution of Civil Engineering (GCC 2015). This document is obtainable separately, and Tenderers shall obtain their own copies.
- 3) The South African National Standards for Civil Engineering Construction (SANS 1200). This document is obtainable separately, and Tenderers shall obtain their own copies of the applicable Sections.
- 4) Drawings, issued separately from this document, or bound in Section C3.4 (as an Annexure).
- 5) In addition, Tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations, and standards referred to in this document as they are essential for the Tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies, and the participation of targeted enterprise and labour.
 - The Employer's current (as at advertising date) Supply Chain Management Policy.
 - The Preferential Procurement Policy Framework Act No 5 of 2000, and the Preferential Procurement Policy Framework Act Regulations (2022).
 - The Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the Construction Regulations (2014).
 - The Construction Industry Development Board Act No 38 of 2000 and the Regulations issued in terms of the Act (July 2013).
 - SANS 1921:2004 – Construction and Management Requirements for Works Contract, Parts 1-3.
 - Any other eThekweni Policy documents referenced in the Tender Documents.

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

- <https://www.etenders.gov.za/>
- <https://www.durban.gov.za/pages/business/procurement>

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

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

V. Naidoo

Tel: 071-855-8175

eMail: visva.naidoo@durban.gov.za

email queries to be submitted by 07 March 2024 and consolidated question and answers will be uploaded on 14 March 2024

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.2.1.1 Eligibility: General

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

- (a) the Tenderer does not comply with the legal requirements as stated in the Employer's current SCM Policy.
- (b) the Tenderer cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract.
- (c) In the event of a Compulsory Clarification Meeting:
 - i) the Tenderer fails to attend the Compulsory Clarification Meeting.
 - ii) the Tenderer fails to have form "Certificate of Attendance at Clarification Meeting / Site Inspection" (in T2.2) signed by the Employer's Agent or his representative.
- (d) in the case of JV submissions, two or more JV entities have common directors / shareholders or common entities tendering for the same works.
- (e) at the time of closing of tenders, the Tenderer is not registered on the National Treasury Central Supplier Database (CSD) as a service provider. In the case of a Joint Venture, this requirement will apply individually to each party in the Joint Venture.
- (f) The tenderer has not submitted, with this tender, a valid Letter of Good Standing from the Compensation Commissioner as proof of being registered and in good standing with the compensation fund. Reference is to be made to Returnable Document T2.2.13.
- (g) The tenderer fails to complete and sign the Declaration of Municipal Fees in T2.2: "Returnable Documents" and submits the required documentation. Reference is to be made to Returnable Document T2.2.12.
- (h) The tenderer or his nominated subcontractor is not an approved applicator of the propriety branded products to be used in the concrete rehabilitation of the low-level storage tank 1 and including failure to provide documented proof as an approved applicator.

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

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

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

The following are to be noted:

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

F.2.1.2 **Eligibility: CIDB**

Only those tenderers (and their nominated sub-contractor/s, where applicable) who are registered (as "Active") with the CIDB (at time of tender closing), in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a **CE** class of construction work, are eligible to have their tenders evaluated.

Joint ventures are eligible to submit tenders provided that:

- (a) Every member of the joint venture is registered (as "Active") with the CIDB (at time of tender closing),
- (b) The lead partner has a contractor grading designation in the **CE** class of construction work and has a grading designation of not lower than one level below the required grading designation, and
- (c) The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations (2013) is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **CE** class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.

It should be noted that this contract is not part of a Targeted Development Programme (TDP). The CIDB provisions in relation to a Contractor's Potentially Emerging (PE) status do not apply.

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 **eThekwini Municipality's Website**. The entire electronically downloaded document should be printed on white A4 paper (single-sided) and suitably bound by the tenderer.

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

"Addenda will be published, in electronic format, on the 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:
Southern Wastewater Treatment Works, Administration Building,
(co-ordinates -29.955135360820552, 30.97299685576011)
on Tuesday, 22 February 2024 at 10h00

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

F.2.12 Alternative tender offers: Alternative tender offers shall be considered for the concrete rehabilitation of the low-level storage tank 1 only, and the tenderer shall submit a detailed specification of the alternative offer, including the propriety branded products that shall be used and the tenderer shall offer an unconditional ten (10) year guarantee on his workmanship which shall also include the guarantee of all propriety products offered. The alternative offer shall take into account the harsh chemical environment that the concrete structure is exposed to.

F.2.13 Submitting a tender offer: Submissions must be submitted on official submission documentation issued (either in hard copy or in electronic format) by the eThekweni Municipality.

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

- Contract No. : **WS-7780**
- Contract Title : **Southern Wastewater Treatment Works: Concrete Rehabilitation of the Low-Level Storage Tank 1 and Construction of an Electrical Substation and Meter Room**

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

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

Tenderers are to include, with their 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. "WS-7780 – **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, 22 March 2024**
- 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

Reference is also to be made to returnable form 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.

Compensation Commissioner

Reference is also to be made to returnable form T2.2.13: “Eligibility: Registration with Compensation Commissioner”.

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

Failure to comply will make the tender non-responsive.

Central Supplier Database (CSD)

Reference is also to be made to returnable form T2.2.14: “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.

CIDB Registration

Reference is also to be made to returnable form T2.2.15: “Eligibility: Verification of CIDB Registration and Status”.

Registration with the CIDB must be reflected as “Active” at time of tender closing.

Tenderers are to include with their submission a printout of their **CIDB Registration**, obtained from the CIDB website (<https://registers.cidb.org.za/PublicContractors/ContractorSearch>).

The Joint Venture Grading Designation Calculator should be used when submitting as a Joint Venture (<https://registers.cidb.org.za/PublicContractors/JVGradingDesignationCalc>).

The date of obtaining the CIDB printout(s) is to be indicated on the printout.

F.3: THE EMPLOYER'S UNDERTAKINGS

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

F.3.11 Evaluation of Tender Offers:

Functionality

FUNCTIONALITY will be evaluated to determine the responsiveness of tenders received. The minimum score for **FUNCTIONALITY is 60 points**. Those tenders not achieving the minimum score will be deemed non-responsive.

The functionality Criteria, Sub-Criteria, Points per Criteria/ Sub-Criteria, Returnable Documentation and Schedules, Method of Evaluation, and Prompts for Judgement are as specified in T1.2.3: "Additional Conditions of Tender".

Preference Point System

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

Price Points

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

Preference Points

Reference is also to be made to T2.2.7: "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	90/10
Race: Black (w1)	Equals 0%	0	n/a
	Between 0% and 51%	5	n/a
	Greater or equal to 51% and less than 100%	12	n/a
	Equals 100%	15	n/a
Gender: Female (w2)	Equals 0%	0	n/a
	Between 0% and 51%	2	n/a
	Greater or equal to 51% and less than 100%	4	n/a
	Equals 100%	5	n/a
Maximum Goal Points:		20	n/a

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

- w1 = 75%, w2=25% (where: w1 + w2 = 100%)

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 BBEE 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 is **registered, and "Active", with the Construction Industry Development Board**, at time of tender closing, in an appropriate contractor grading designation.
- (c) The tenderer or any of its directors/shareholders is **not listed on the Register of Tender Defaulters** in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector.
- (d) The tenderer has not:
 - Abused the Employer's Supply Chain Management System; or
 - Failed to perform on any previous contract and has been given a written notice to this effect.
- (e) The tenderer has completed the **Compulsory Enterprise Questionnaire** and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the Employer or potentially compromise the tender process.
- (f) The tenderer is **registered and in good standing with the compensation fund or with a licensed compensation insurer**.
- (g) The Employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the **necessary competencies and resources to carry out the work safely**.

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

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

F.3.15 Complete adjudicator's contract: Refer to the General Conditions of Contract and the Contract Data.

F.3.17 Copies of contract: The number of paper copies of the signed contract to be provided by the Employer is ONE (1).

Tenderers are to include, with their "hard copy" submission, a memory-stick containing an electronically scanned (300 dpi resolution) Public Document Format (PDF) copy of their complete bid submission. This PDF file should be named using the contract number and the Tenderer's name, eg. "WS-7780 – **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
 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.

T1.2.3.4 Targeted Procurement

Targeted Procurement provisions are not applicable to this tender.

T1.2.3.5 Functionality Specification

Functionality Evaluation is applicable to this tender.

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

Functionality Criteria / Sub Criteria		Maximum Points Score
Tenderer's Experience		40
Project Organogram and Experience of Key Staff	Site Agent	15
	Concrete Repair Foreman	15
	Building Foreman	10
Preliminary Programme		10
Construction Methodology & Quality Control		10

Maximum possible score for Functionality (M_s) 100

The minimum number of evaluation points for Functionality is **60**. Only those tenderers who achieve the minimum number of Functionality evaluation points (or greater) will be eligible to have their tenders further evaluated.

Functionality shall be scored by not less than three evaluators and the scores of each of the

evaluators will be averaged, weighted and then totalled to obtain the final score for Functionality. Each evaluation criteria will be assessed in terms of six indicators and scores allocated according to the following table:

Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
0	20	40	60	80	100

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

Functionality Criteria	Returnable Schedules
Tenderer's Experience	<ul style="list-style-type: none"> Experience of Tenderer
Project Organogram and Relevant Experience of Key Staff	<ul style="list-style-type: none"> Proposed Organisation and Staffing Key Personnel CV's with Relevant Experience of Key Personnel
Preliminary Programme	<ul style="list-style-type: none"> Preliminary Programme
Construction Methodology & Quality Control	<ul style="list-style-type: none"> Construction Approach, Methodology, and Quality Control Schedule of Proposed Subcontractors Plant and Equipment

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

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

Criterion: Tenderer's Experience	
<p>Note: Projects of a similar nature that will be considered shall be of concrete rehabilitation using propriety branded products of which the <u>tenderer or his nominated subcontractor</u> shall be an approved applicator.</p> <p>Failure to submit proof as an approved applicator of the propriety branded products to be used shall render the tenderer non-responsive.</p> <p>Where the tenderer is claiming the experience of his nominated subcontractor for functionality, the subcontractor's CIDB grading shall be in accordance with the sum tendered for the subcontracted portion of work, and in accordance with the CIDB regulations. Full details of the nominated subcontractor, and rand value of work being subcontracted, to be provided at tender submission, failing which will render the tenderer non-responsive.</p>	
Level 0	No information provided; OR submission of no substance / irrelevant information provided / not an approved applicator as mentioned above.
Level 1	To have successfully completed <u>1 project</u> of a similar nature within the past 10 years.
Level 2	To have successfully completed <u>2 projects</u> of a similar nature within the past 10 years.
Level 3	To have successfully completed <u>3 projects</u> of a similar nature within the past 10 years.
Level 4	To have successfully completed <u>4 projects</u> of a similar nature within the past 10 years.
Level 5	To have successfully completed <u>5+ projects</u> of a similar nature within the past 10 years.

Criterion: Project Organogram and Experience of Key Staff

Note: Relevant experience (site agent and concrete repair foreman) that will be considered shall be of concrete rehabilitation using specialist repair products. Relevant experience (building foreman) that will be considered shall be of facebrick and reinforced concrete construction in buildings.

Where the tenderer is claiming the experience of key staff of his nominated subcontractor for functionality, full details of the nominated subcontractor and their key staff to be provided at tender submission, failing which will render the tenderer non-responsive.

	SITE AGENT	CONCRETE REPAIR FOREMAN	BUILDING FOREMAN
Level 0	No information provided OR submission of no substance / irrelevant information provided OR less than 2 year's experience OR Relevant accredited diploma / degree and less than 1 year's relevant experience.	No information provided OR submission of no substance / irrelevant information OR Less than 2 year's relevant experience.	No information provided OR submission of no substance / irrelevant information OR Less than 2 year's relevant experience.
Level 1	Relevant accredited diploma / degree and minimum 1 year's relevant experience.	Minimum 2 year's relevant experience.	Minimum 2 year's relevant experience.
Level 2	Relevant accredited diploma / degree and minimum 2 year's relevant experience.	Minimum 3 year's relevant experience.	Minimum 3 year's relevant experience.
Level 3	Relevant accredited diploma / degree and minimum 4 year's relevant experience.	Minimum 5 year's relevant experience.	Minimum 5 year's relevant experience.
Level 4	Relevant accredited diploma / degree and minimum 7 year's relevant experience.	Minimum 8 year's relevant experience.	Minimum 8 year's relevant experience.
Level 5	Relevant accredited diploma / degree and minimum 9 year's relevant experience.	Minimum 10 year's relevant experience.	Minimum 10 year's relevant experience.

Criterion: Preliminary Programme

Level 0	No information provided; OR submission of no substance / irrelevant information provided
Level 1	The tenderer has misunderstood certain aspects of the Scope of Work and does not deal with the critical aspects of the project.
Level 2	The programme does not adequately deal with the critical characteristics of the project or the plan and manner in which risk is to be managed.
Level 3	Programme covers all the applicable individual activities which are in an acceptable sequence, with appropriate durations, and is in accordance with generally accepted construction practice, and is in line with Clause 1.1.1.14 of the Conditions of Contract (time for achieving Practical Completion). Programme must show the critical path
Level 4	In addition to the requirements of level 3, the programme covers all activities, meetings, requirements and is sufficiently flexible to accommodate changes that may be required during execution within project completion time.
Level 5	In addition to the requirements of level 4, the program covers all activities, meetings, requirements and accommodates changes and details ways to improve the overall project outcome within the completion time.

Criterion: Construction Methodology & Quality Control	
Note:	Construction methodology and quality control shall be specific to concrete rehabilitation of the low level storage tank using specialist repair products and shall also include facebrick and reinforced concrete construction of the substation building.
Level 0	No information provided; OR submission of no substance / irrelevant information provided
Level 1	The technical approach / methodology, plant and equipment is poor and gives no relevant information in satisfying the projects objectives Quality control statement is poor with no relevant information
Level 2	The technical approach and/or methodology is less than acceptable and unlikely to satisfy project objectives or requirements. Plant and equipment is unlikely to provide adequate protection of the works. Quality control statement is generic.
Level 3	Brief overview of a site specific methodology which encompasses all programmed activities in appropriate order and includes staff, plant and equipment resources, including subcontractors if applicable, a brief description of preparatory work, construction processes including finishing works for each activity. Quality control statements are site specific with statements covering required sampling and testing requirements for the programmed activities.
Level 4	The methodology is specifically tailored to address specific project requirements. The methods and approach to managing risk etc. are specifically tailored to the critical characteristics of the project. The plant and equipment are specifically tailored to the project requirements and are sufficiently adaptable to accommodate changes that may be required during execution Quality control statements are site specific covering required sampling and testing for programmed activities including site specific quality control checklist for programed activities
Level 5	Besides meeting the "above Level 4" rating, the important issues are approached in an innovative and efficient way, indicating that the tenderer has excellent knowledge of working in the projects environment and producing the required final product. Plant and equipment proposals and ownership/provision arrangements are most likely to ensure a satisfactory project outcome. Quality control statements are site specific covering required sampling and testing for all programmed activities including site specific quality control checklist for all programed activities

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

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T2.2.2	Certificate of Attendance at Clarification Meeting.....	18
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T2.2.11	Record of Addenda to Tender Documents (if applicable).....	34

Eligibility

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Technical or Functionality Evaluation

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T2.2.22	Schedule of Proposed Subcontractors.....	45
T2.2.23	Plant and Equipment.....	46
T2.2.24	Contractor's Health and Safety Plan	47

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 [34](#).

NOTE

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

T2.2.1 COMPULSORY ENTERPRISE QUESTIONNAIRE

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	MAAA
1.6	eThekweni Supplier Database: Reference number (PR), if any:	PR
1.7	VAT registration number, if any:	
1.8	CIDB registration number, if any:	
1.9	Department of Labour: Registration number	
1.10	Department of Labour: Letter of Good Standing Certificate number	
2.0	Particulars of sole proprietors and partners in partnerships (attach separate pages if more than 4 partners)	
	Full Name	Identity No.
	Personal income tax No. *	
2.1		
2.2		
2.3		
2.4		
3.0	Particulars of companies and close corporations	
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:

- i) authorizes the Employer to verify the tenderers tax clearance status from the South African Revenue Services that it is in order.
- ii) 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.
- iii) 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.
- iv) 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.
- v) 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 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 Clarification Meeting held for all tenderers, the details of which are stated in the Tender Data (F.2.7).

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 Agent's Representative, namely:

Name:

Signature:

Date:

T2.2.3 TAX COMPLIANCE STATUS PIN / TAX CLEARANCE CERTIFICATE

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

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

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 CONTRACTOR'S HEALTH AND SAFETY DECLARATION

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

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

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

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

Declaration by Tenderer

- 1 I, the undersigned, hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
- 2 I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
- 3 I propose to achieve compliance with the Regulations by one of the following **(Tenderers are to Circle Applicable - Yes or No)**:

- (a) From my own competent resources as detailed in 4(a) hereafter.
- (b) From my own resources still to be appointed or trained until competency is achieved, as detailed in 4(b) hereafter:
- (c) From outside sources by appointment of competent specialist Subcontractors as detailed in 4(c) hereafter:

Circle Applicable	
Yes	NO
Yes	NO
YES	NO

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

NAMES OF COMPETENT PERSONS	POSITIONS TO BE FILLED BY COMPETENT PERSONS

(b) Details of training of persons from my company's own resources (or to be hired) who still have to be trained to achieve the necessary competency:

- (i) By whom will training be provided?
- (ii) When will training be undertaken?
- (iii) Positions to be filled by persons to be trained or hired:

(c) Details of competent resources to be appointed as subcontractors if competent persons cannot be supplied from own company:

- Name of proposed subcontractor:
- Qualifications or details of competency of the subcontractor:

- 5 I, the undersigned, hereby undertake, if this tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 7(1) of the Construction Regulations, which plan shall be subject to approval by the Client.
- 6 I, the undersigned, confirm that copies of this company's approved Health and Safety Plan, the Client's Safety Specifications as well as the OHSА 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Principal Contractor's personnel, the Client's personnel, the Employer's Agent, visitors, and officials and inspectors of the Department of Labour.
- 7 I, the undersigned, hereby confirm that adequate provision has been made in the tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSА 1993 Construction Regulations 2014, and that I will be liable for any penalties that may be applied by the Client in terms of the said Regulations (Regulation 33) for failure on the Principal Contractor's part to comply with the provisions of the Act and the Regulations.
- 8 I, the undersigned, agree that failure to complete and execute this declaration to the satisfaction of the Client will mean that this company is unable to comply with the requirements of the OHSА 1993 Construction Regulations (2014) and accept that this tender will be prejudiced and may be rejected at the discretion of the Client.

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 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**¹.
- 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.

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

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? YES NO
 If yes, furnish particulars:

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? YES NO
 If yes, furnish particulars:

3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? YES NO
 If yes, furnish particulars:

3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? YES NO
 If yes, furnish particulars:

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract? YES NO
 If yes, furnish particulars:

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:

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

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

	Circle Applicable	
1.0 Are you by law required to prepare annual financial statements for auditing?	YES	NO
1.1 If YES, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.		
2.0 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: _____

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

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

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

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

1.2 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 (price) and 20 (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:

<u>80 / 20 Points System</u>	OR	<u>90 / 10 Points System</u>
$P_s = 80 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$		$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$

Where:

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

4.0 POINTS AWARDED FOR SPECIFIC GOALS

- 4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goal(s) stated in **Table 1** below, as supported by proof/ documentation stated in the **Conditions of Tender**:
- 4.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of:
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system, or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

TABLE 1: Specific Goals for the tender and 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)	Maximum Number of points ALLOCATED (90/10 system)	Number of points CLAIMED (80/20 system)	Number of points CLAIMED (90/10 system)
Ownership Goal: Race (black)	15	n/a		n/a
Ownership Goal: Gender (female)	5	n/a		n/a
Total CLAIMED Points (20 Maximum)				n/a

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: _____

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

- 1.0 This Municipal Bidding Document must form part of all bids invited.
- 2.0 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3.0 The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a) abused the municipal entity's supply chain management system or committed any improper conduct in relation to such system.
 - b) been convicted for fraud or corruption during the past five years.
 - c) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years.
 - d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4.0 In order to give effect to the above, the following questions must be completed and submitted with the bid.

4.1 Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?

(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer / Authority of the institution that imposed the restriction after the audi alteram partem rule was applied.)

The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.

Circle Applicable	
YES	NO

4.1.1 If YES, provide particulars.

.....

.....

4.2 Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?

The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.

YES	NO
-----	----

4.2.1 If YES, provide particulars.

.....

.....

4.3 Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?

YES	NO
-----	----

4.3.1 If YES, provide particulars.

.....

.....

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:

.....
.....

T2.2.9 MBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION**NOTES**

- ¹ Includes price quotations, advertised competitive bids, limited bids and proposals.
- ² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.
- ³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

- 1.0 This Municipal Bidding Document (MBD) must form part of all **bids**¹ invited.
- 2.0 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or **bid rigging**).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3.0 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
- a. take all reasonable steps to prevent such abuse;
 - 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 consortium⁹ will not be construed as collusive bidding.

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

8. In addition, there have been no consultations, communications, agreements, or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

NAME (Block Capitals): _____

Date

SIGNATURE: _____

T2.2.10 JOINT VENTURES AGREEMENTS

Joint Ventures are not permitted for this tender.

T2.2.11 RECORD OF ADDENDA TO TENDER DOCUMENTS

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

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

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

It is also confirmed that the requirements, as stated on the Addenda, have been complied with.

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.12 ELIGIBILITY: DECLARATION OF MUNICIPAL FEES

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

I, the undersigned, do hereby declare that the Municipal fees of:

.....
 (full name of Company / Close Corporation / partnership / sole proprietary/Joint Venture)

(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: _____

T2.2.13 ELIGIBILITY: REGISTRATION WITH COMPENSATION COMMISSIONER

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

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

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

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

Clause 82: Employer to furnish returns of earnings

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

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

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

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

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

Clause 89: Mandators and contractors

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

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

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

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

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

NAME (Block Capitals):

Date

SIGNATURE:

T2.2.14 ELIGIBILITY: CSD REGISTRATION REPORT

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

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

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.

The screenshot shows the beginning of a CSD Registration Report. At the top left is the logo for the Central Supplier Database for Government. To the right are two input fields: 'Report Date:' and 'Report Ran By:'. Below this is a green header bar with the text 'CSD REGISTRATION REPORT'. The main section is titled 'SUPPLIER IDENTIFICATION' and contains a table of fields for data entry:

Supplier number		Have Bank Account	
Is supplier active?		Total annual turnover	
Supplier type		Financial year start date	
Supplier sub-type		Registration date	
Legal name		Created by	
Trading name		Created date	
Identification type		Edit by	
Government breakdown		Edit date	
Business status		Restricted Supplier	
Country of origin		Restriction Last Verification Date	
South African company/CC registration number			

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: _____

T2.2.15 ELIGIBILITY: VERIFICATION OF CIDB REGISTRATION AND STATUS

Reference is to be made to Clause F.2.1.1 and F.2.23 of the Tender Data.

The Conditions of Tender, **Clause F.2.1.1: Eligibility**, requires a tenderer to be registered, as "Active", with the CIDB (at time of tender closing), in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations. The required class of construction work is specified in Clause F.2.1.1.

CIDB Registrations can be obtained from the CIDB website at <https://registers.cidb.org.za/PublicContractors/ContractorSearch>. 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.

Home

Contractor Detail Print

Contractor Detail

CRS Number: _____ Type of Enterprise: _____

Contractor Name: _____ Registration Date: _____

Trading Name: _____ Expiry Date: _____

Status: _____

Contractor Grades

Grade: _____

Back

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[Website technical enquires: contact](#)

01/01/2017

Tenderers are to include, at the back of their tender submission document, a printout of their registration with the CIDB.

*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: _____

T2.2.16 FUNCTIONALITY: EXPERIENCE OF TENDERER

Reference is to be made to **Clause T1.2.3.5** of the Tender Data.

This form is to be copied and submitted for each project of experience, as may be required.

Where options are provided ('), only one (1) selected option should be clearly marked with an " X " .

Tenderer's CIDB Grade:	1' 2' 3' 4' 5' 6' 7' 8' 9'	Experience as a:	Sub-Contractor'	Main Contractor'																			
Client / Employer:	Entity Name:																						
	Contact Name:																						
	Contact Tel:			-																			
	Contact Cell:			-																			
	Contact email / other:																						
Client OR Main Contractor's Details <i>Should the Employer's reasonable attempts to make contact, to verify the information provided, fail (for whatever reason) this experience submission will be considered invalid.</i>	Entity Name:																						
	Contact Name:																						
	Contact Tel:			-																			
	Contact Cell:			-																			
	Contact email / other:																						
Contract Details	Contract Number:																						
	Contract Title:																						
	Has this Contract been completed?	Y'	N'	Commencement Date:		d	d	m	m	2	0	y	y	Completion Date (if applicable):		d	d	m	m	2	0	y	y
Tendered Value (Contract Sum) OR Sub-Contract Value:	R	Final Contract Price OR Final Value of Sub-Contract:										R											

Contract Scope-of-Work (Description of Works components)	If available in hard copy, the Scope-of-Work can be attached. Only include the Scope-of-Work (contract description). <u>The Specification is not required.</u>

In addition to the Scope-of-Work (entered above or attached) the following documentation / information is required to be attached to the back of this form.

Contractor Type and Contract Status	Proof of Sub-Contract Agreement	Letter of Award OR Form of Offer & Acceptance	Most recent Payment Certificate, OR most recent INVOICE, with Quantities summary	Final Payment Certificate, OR most recent INVOICE, with Quantities summary	Completion Certificate
Current Contract as Sub-Contractor					
Completed Contract as Sub-Contractor					
Current Contract as Main Contractor		X	X		
Completed Contract as Main Contractor		X		X	X

Failure to complete and submit this returnable form, and provide the above supporting documentation/ information, for each submission of experience, will invalidate that experience submission

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: _____

T2.2.17 PROPOSED ORGANISATION and STAFFING

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

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

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

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

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

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

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:

T2.2.18 KEY PERSONNEL (To suit Functionality)

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

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

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

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

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

NAME (Block Capitals):

Date

.....

SIGNATURE:

.....

.....

T2.2.19 EXPERIENCE OF KEY PERSONNEL

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

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

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

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

Each CV should be structured under the following headings:

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

I, the undersigned, who warrants that they are authorised to sign 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:

T2.2.20 PRELIMINARY PROGRAMME (To suit Functionality)

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

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

Note: The programme must be based on the completion time as specified in the Contract Data and shall include the critical path.

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:

T2.2.21 CONSTRUCTION APPROACH, METHODOLOGY, AND QUALITY CONTROL
(To suit Functionality)

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

Construction Approach and Methodology

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

Quality Control

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

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

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:**

T2.2.23 PLANT and EQUIPMENT

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

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

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

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

Attach additional pages if more space is required

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

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

Attach additional pages if more space is required

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

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

NAME (Block Capitals): _____

Date

SIGNATURE: _____

T2.2.24 CONTRACTOR'S HEALTH AND SAFETY PLAN

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

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

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

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

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

NAME (Block Capitals):

Date

SIGNATURE:

PART C1: AGREEMENT AND CONTRACT DATA

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.1: OFFER

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

Contract No: **WS-7780**

Contract Title: **Southern Wastewater Treatment Works: Concrete Rehabilitation of the Low-Level Storage Tank 1 and Construction of an Electrical Substation and Meter Room**

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

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

*** The offered total of the prices inclusive of Value Added Tax is:**

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

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 :
:

Telephone :

Witness:

Signature : **Date** :

Name (in capitals) : :

Notes:

*** Indicates what information is mandatory.**

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

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.2: FORM OF ACCEPTANCE

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 Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

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 fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

Signature (*person authorized to sign the acceptance*) :

Name (*of signatory in capitals*) :

Capacity (*of Signatory*) :

Name of Employer (*organisation*) :

Address :

:

Witness:

Signature : **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 [General Conditions of Contract for Construction Works \(2015 3rd Edition\)](#), (GCC 2015) published by the South African Institution of Civil Engineering. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (Tel: 011-805-5947, Fax: 011-805-5971, E-mail: civilinfo@saice.org.za).

The Contract Data (including variations and additions) shall amplify, modify, or supersede, the GCC 2015 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 GCC 2015 to which it mainly applies.

C1.2.2 CONTRACT DATA

C1.2.2.1 DATA TO BE PROVIDED BY THE EMPLOYER

- 1.1.1.13 The **Defects Liability Period**, from the date of the Certificate of Completion, is **1 Year**.
- 1.1.1.14 The **time for achieving Practical Completion**, from the Commencement Date is **60 Weeks**. The period as stated in 5.3.2, and the 7 days referred to in 5.3.3, are included in the above time for achieving Practical Completion. The special non-working days as stated in 5.8.1 are excluded from the above time for achieving Practical Completion.
- 1.1.1.15 The Employer is the eThekweni Municipality as represented by:
Deputy Head: [Water and Sanitation Engineering](#)
- 1.2.1.2 The address of the Employer is:
Physical: Water and Sanitation unit, 3 Prior Road, Durban, 4001
Postal: Water and Sanitation unit, PO Box 1038, Durban, 4000
Telephone: [031-311 8602](tel:031-3118602)
E-Mail: bhavna.soni@durban.gov.za
- 1.1.1.16 The **name of the Employer's Representative** is: V. Naidoo
- 1.2.1.2 The address of the Employer' Agent is:
Water and Sanitation unit, 3 Prior Road, Durban, 4001
Postal: Water and Sanitation unit, PO Box 1038, Durban, 4000
Telephone: [071-855 8175](tel:071-8558175)
E-Mail: visva.naidoo@durban.gov.za
- 1.1.1.26 The **Pricing Strategy** is by **Re-measurement Contract**.
- 3.2.3 The Employer's Agent shall obtain the **specific approval of the Employer** before executing any of his functions or duties according to the following Clauses of the General Conditions of Contract:
- 6.3: Council approval in order to authorise any expenditure in excess of the Tender Sum plus **15%** contingencies.
- 4.11.1 To carry out and complete the works, the Contractor shall employ a competent Site Agent and Foreman as part of the key staff. It is a requirement for the Contractor's Site Agent and Foreman to each have a minimum of 3 years relevant experience including experience on projects of a similar nature. The CV's of the Site Agent and the Foreman should be submitted to the Employer's

Agent's Representative for acceptance by the Department (reference is made to Cl.5.3.1 of the Contract Data).

Note:

- i) "similar nature" implies projects that were of a value of at least 70% of this tender's value, and had a comparable Scope of Work in terms of technical requirements and operations.
- ii) "experience" implies experience on projects of a similar nature.
- iii) "accredited degree / diploma" implies a minimum 3-year qualification within the built environment, from a registered University or Institute of Technology.

5.3.1 The **documentation required** before commencement with Works execution are:

- **Health and Safety Plan** (refer to Clause 4.3)
- **Initial Programme** (refer to Clause 5.6)
- **Security** (refer to Clause 6.2)
- **Insurance** (refer to Clause 8.6)
- **CV(s) of Key Site Staff** (refer to Clause 4.11.1)
- **CPG Implementation Plan** (if applicable)

5.3.2 The **time to submit the documentation** required before commencement with Works is **14 Days**.

5.3.3 Add the following paragraph:

"If a construction work permit, in terms of Clause 3(1) of the Construction Regulations (2014), is applicable, the instruction to commence carrying out of the works may only be issued once the construction work permit has been obtained by the Employer's Agent. If a construction work permit is applicable, the contractor shall allow for a minimum period of 37 days, after the submission (or re-submission) of the documentation referred to in Clause 5.3.1., for the issuing of the construction work permit."

5.8.1 The **non-working days** are **Saturdays and** Sundays.

(5.1.1) The **special non-working** days are:

- All statutory holidays as declared by National or Regional Government.
- The year-end break:
 - Commencing on the first working day after 15 December.
 - Work resumes on the first working day after 5 January of the next year.

5.8.1 Delete the words "sunset and sunrise" and replace with "17:00 and 07:00".

5.12.2.2 **Abnormal Climatic Conditions (Rain Delays)** - The numbers of days per month, on which work is expected not to be possible as a result of rainfall, for which the Contractor shall make provision, is given in the table below. During the execution of the Works, the Employer's Agent's Representative will certify a day lost due to rainfall only if at least 75% of the work force and plant on site could not work during that specific working day.

Extension of time as a result of rainfall shall be calculated monthly being equal to the number days certified by the Employer's Agent's Representative as lost due to rainfall, less the number of days allowed for as in table below, which could result in a negative figure for certain months. The total extension of time for which the Contractor may apply, shall be the cumulative algebraic sum of the monthly extensions. Should the sum thus obtained be negative, the extension of time shall be taken as NIL.

<u>Month</u>	<u>Days Lost</u>	<u>Average Rainfall</u>	<u>Month</u>	<u>Days Lost</u>	<u>Average Rainfall</u>
January	4*	134	July	1	39
February	3	113	August	2	62
March	3	120	September	2	73
April	2	73	October	3	98
May	2	59	November	3	108
June	1	28	December	1*	102
TOTAL	27	1009mm	* = The number of working days lost allows for the annual statutory Construction holiday in December and January of each year.		

5.13.1 The **penalty for delay** in failing to complete the Works is **0.05% of the contract price** (per Day).

5.14.1 The **requirements for achieving Practical Completion** will be determined by the Employer's Agent (in consultation with the Contractor) and recorded in the minutes of the first Site Meeting / Handover Meeting. (Refer to 1.1.1.24 for a generic definition.) The requirements are to be regularly reviewed with respect to any variations to the Contract.

5.16.3 The **latent defect liability** period is **10 Years**.

6.2.1 **Security (Performance Guarantee)**: Delete the word "selected" and replace it with "stated".

The liability of the Performance Guarantee shall be as per the following table:

Value of Contract (incl. VAT)	Performance Guarantee Required
Less than or equal to R 1m	Nil
Greater than R 1m and less than or equal to R 10m	5% of the Contract Sum
Greater than R 10m	10% of the Contract Sum

6.5.1.2.3 The **percentage allowance** to cover overhead charges for daywork are as follows:

- **25%** of the gross remuneration of workmen and foremen actually engaged in the daywork;
- **15%** on the net cost of materials actually used in the completed work.

No allowance will be made for work done, or for materials and equipment for which daywork rates have been quoted at tender stage.

- 6.8.2 **Contract Price Adjustment Factor:**
This is a fixed price contract and **NO** escalation will be applicable.
- 6.10.1.5 The **percentage advance** on materials not yet built into the Permanent Works is **80%**.
The **percentage advance** on Plant not yet supplied to Site: **Not Required**
- 6.10.3 **Retention Money:** Delete the word “selected”.
The percentage retention on the amounts due to the Contractor is 10%.
The limit of “retention money” is 5% of the Contract Sum.
Should the Contract Price exceed the Contract Sum then the limit of “retention money” is 5% of the Contract Price.
Interest will not be paid on retention withheld by the Employer.
- 8.6.1.1.2 The **value of Plant and materials** supplied by the Employer to be included in the insurance sum: **Not Required.**
- 8.6.1.1.3 The **amount to cover professional fees** for repairing damage and loss to be included in the insurance sum: **R 2,000,000.**
- 8.6.1.2 **SASRIA Coupon Policy** for Special Risks to be issued in joint names of Council and Contractor for the full value of the works (including VAT).
- 8.6.1.3 The limit of indemnity for **liability insurance**: **R 10,000,000.**
- 8.6.1.4 **Ground Support Insurance:**
- Minimum amount for any one occurrence, unlimited as to the number of occurrences, against any claim for damages or loss caused by vibration and / or removal of lateral support: **N/A.**
 - Maximum first excess: **N/A.**
- 8.6.1.5 Furthermore, the insurance cover effected by the Contractor shall meet the following requirements:
- Third Party Insurance (Public Liability)**
- Minimum amount for any one occurrence, unlimited as to the number of occurrences, for the period of the contract, inclusive of the maintenance period: **R 20,000,000.**
 - Consequential loss to be covered by policy: **Yes.**
 - Liability section of policy to be extended to cover blasting: **Nil.**
 - Maximum excess per claim or series of claims arising out of any one occurrence: **R25,000.**
- Principal's own surrounding Property Insurance**
- Minimum amount for any one occurrence unlimited as to the number of occurrences against any claim for damage which may occur to the Council's own surrounding property: **R5,000,000.**
 - Maximum first excess: **R 25,000.**
- Insurance of Works**
- Minimum amount for additional removal of debris (no damage): **R 2,000,000.**
 - Minimum amount for temporary storage of materials off site, excluding Contractor's own premises: **R 2,000,000.**
 - Minimum amount for transit of materials to site: **R 2,000,000.**

8.6.5 **Approval by Employer:** At the end of the sub-clause, add the following paragraph:

"Except where otherwise provided in the Special Conditions of Contract, the insurance cover effected by the Contractor in terms of this clause shall not carry a first loss amount greater than those set out below:

Contract Price	First Loss
Less than R 100,000	R 5,000
R 100,000 to R 500,000	R 10,000
R 500,000 to R 1,000,000	R 20,000
R 1,000,000 to R 2,000,000	R 30,000
R 2,000,000 to R 4,000,000	R 40,000
Greater than R 4,000,000	R 50,000

The insurance policy shall contain a specific provision whereby cancellation of the policy prior to the end of the period referred to in Cause 8.2.1 cannot take place without the prior written approval of the Employer."

10.7.1 Failing ad-hoc adjudication, the determination of disputes shall be by arbitration.

C1.2.2.2 DATA TO BE PROVIDED BY CONTRACTOR

1.1.1.9 The legal name of Contractor is:

.....
.....
.....
.....

1.2.1.2 The Physical address of the Contractor is:

.....
.....
.....
.....

The Postal address of the Contractor is:

.....
.....
.....
.....

The contact numbers of the Contractor are:

Telephone:

Fax:

The E-Mail address of the Contractor is:

.....

C1.2.3 ADDITIONAL CONDITIONS OF CONTRACT

C1.2.3.1 COMMUNITY LIAISON OFFICER

A Community Liaison Officer (CLO) is **NOT** required.

C1.2.3.2 EMPLOYMENT OF LOCAL LABOUR

Employment of local labour is **NOT** required.

C1.2.3.3 CONTRACTOR PARTICIPATION GOAL (CPG)

It is a condition of contract that the contractor must allow for a minimum of **20%** of the contract value (excluding PC Sum items and Fixed Cost allowances) to be subcontracted to contractors who are **>51% 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.

C1.2.3.4 FTE (Full Time Equivalent) EMPLOYMENT INFORMATION

It is a condition of contract that the Contractor supplies the Employer’s Agent’s Representative with information in respect of the employment of all foremen, artisans and labour (skilled and unskilled) employed to work on this contract. The information required is:

- Initials (per ID doc)
- Last Name (per ID doc)
- ID Number
- Disability (y / n)
- Education Level

Level 1 Unknown	Level 2 No Schooling	Level 3 Grade 1-3	Level 4 Grade 4	Level 5 Grade 5-6
Level 6 Grade 7-8	Level 7 Grade 9	Level 8 Grade 10-11	Level 9 Grade 12	Level 10 Post Matric

- Category of Employment

Category A: Employed as Local Labour for this contract only Category B: Temporarily employed by the Contractor Category C: Permanently employed by the Contractor
--

In addition, the following information is required in respect of each person listed above, on a monthly basis:

- Number of days worked during the month;
- Daily wage rate;
- Number of training days during the month.

The information is to be forwarded in a format acceptable to the Employer’s Agent’s Representative, but preferably in the form of an emailed EXCEL file (an original file, to be used as a template, will be issued to the Contractor). Contractors without computer facilities will be required to submit a hard copy of the information in a format as agreed to between the Contractor and the Employer’s Agent’s Representative.

In addition to the tax invoice, to be submitted by the Contractor with his monthly statement, mentioned in Clause 6.10.4 of GCC 2015, the Employer reserves the right to withhold payment until the monthly FTE information has been forwarded to the Employer’s Agent’s Representative. No additional payment for complying with the above will be made and the Contractor is to make allowance for complying through the time related P & G items (sum) under Part AA: Preliminaries, of the Bill of Quantities.

C1.2.3.5 PERFORMANCE MONITORING OF SERVICE PROVIDERS

For contract awards over R10m, the Contractor shall be subjected to “Performance Monitoring” assessments in terms of the applicable Section (S.53) of the Employer’s Supply Chain Management Policy.

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

C1.2.3.6 EXCEPTED RISKS (Clause 8.3)

Pursuant to Clause 8.3 of the Conditions of Contract (GCC 2015), the Employer shall not be liable for the payment of standing time costs as a result of the occurrence of any of the “Excepted Risks” as defined under Clause 8.3.

However, the Employer shall reimburse the Contractor in respect of plant de-establishment and re-establishment costs as a result of “Excepted risks” when a written instruction to de-establish is issued to the Contractor.

C2.1: PRICING ASSUMPTIONS / INSTRUCTIONS

C2.1.1 GENERAL

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

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

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

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

Clause 8 of each Standard Engineering Specification, read together with the relevant clauses of the Scope of the works, set out what ancillary or associated work and activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standard Engineering Specification, or the Scope of the works, conflict with the Bill of Quantities, the requirements of the Standard Engineering Specification or Scope of the work, as applicable, shall prevail.

C2.1.3 QUANTITIES REFLECTED IN THE SCHEDULE

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

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities and in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications and the Drawings. Unless otherwise stated, items are measured

net in accordance with the Drawings, and no allowance has been made for waste.

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

C2.1.4 PROVISIONAL SUMS / PRIME COST SUMS

Where Provisional Sums or Prime Cost sums (PC Sum) are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with **Clause 6.6 of the General Conditions of Contract**. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

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

C2.1.5 MONTHLY PAYMENTS

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

C2.1.6 PRICING OF THE BILL OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to

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

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

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

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

C2.1.7 "RATE ONLY" ITEMS

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

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

For "Rate Only" items no quantities are given in the "Quantity" column but the quoted rate shall apply in the event of work under this item being required. The

Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

C2.1.8 PRELIMINARY AND GENERAL

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

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

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

- (i) the total amount due when the certified value fixed charge items in this section is less than 5% of the net contract price;
- (ii) when the certified value of fixed charge items in this section is greater than 5% of the net contract price, payment will be limited to 5% of the net contract price. The remainder will be paid when the value of the work done under the contract, excluding the value of fixed charge items in this section, is greater than 50% of the net contract price, excluding the value of fixed charge items in this section.

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

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

C2.2: BILL OF QUANTITIES

The Bill of Quantities follows and comprises of 23 pages. The pages are numbered [BoQ 1](#) to [BoQ 23](#)

PART C3: SCOPE OF WORK

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C3.1: PROJECT DESCRIPTION AND SCOPE OF CONTRACT

C3.1.1 Description of Works

The existing Southern Wastewater Treatment Works is responsible for the treatment of effluent and, under high flow conditions, 3 low level storage tanks are used for retention of the effluent before being pumped out to sea. The concrete surfaces of the low level tank 1 has deteriorated over time and the purpose of this project is for the rehabilitation of the tank concrete surfaces.

The wastewater treatment works receives electricity supply from an existing substation within the works premises. The position of the existing substation has caused it to flood out during heavy rains which causes disruptions to the electricity supply.

The additional purpose of this project is to construct a new substation at higher ground.

C3.1.2 Description of Site and Access

The site of the Works is at the Southern Wastewater Treatment Works, located at the end of Byfield Road, Merewent, approximately 14km south of Durban, Kwa-Zulu Natal. Refer to the locality plan included in C4.1.

The Contractor shall be responsible for the reinstatement of any damage caused by him to any of the roads or rights of way. The Council and the landowners shall be indemnified against any damages or claims arising from the use of roads and tracks by the Contractor or his agents.

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

C3.1.3 Nature of Ground and Subsoil Conditions

According to the 1:250 000 geological map of Durban (2930) the site is underlain by the Berea Formation that comprises predominantly red sand and basal conglomerate. Based on the geological map the Berea Formation is sandwiched between dunes of quaternary beach sand deposits.

However, it is highlighted that during a previous site investigation, fill underlain by alluvial soils were encountered on the SWWTW site. The alluvial deposits are most probably due to the site falling within the original Umlazi River floodplain which has now been diverted to the Umlaas Canal.

C3.1.4 SCOPE OF WORK

The Contract to which this specification relates is for the concrete rehabilitation of the existing low level tank 1 and the construction of an electrical substation and associated entrance roadways at the Southern Wastewater Treatment Works.

The Contract covers the supply of all materials, labour, plant and equipment for:

A. Concrete Rehabilitation of Low Level Tank 1:

- Provide temporary access into the tank.
- De-sludge, clean the tank of all debris and disinfect the tank surfaces internally.
- Dispose of all debris from tank clean-up to the approved tip / hazardous landfill site.
- Excavate and backfill around top perimeter of tank for working space.
- Strip and remove all existing sealant and backing material from walls and floor movement joints.
- High pressure jet the entire internal surfaces of the tank and remove excess water.
- Test and remove de-bonded cementitious layer from walls and wall foundations.
- Prepare and apply sprayed repair mortar to de-bonded areas of wall and float flush and cure.
- Prepare and apply moisture barrier coating and high chemical resistant coating to walls and outlet / overflow boxes and cure.
- Prepare and apply crack bridging slurry waterproofing to top of tank walls (internal and earth face) around perimeter and cure.
- Place narrow formwork and joint former and apply sprayed repair mortar to tank floor and outlets and cure.
- Ream out existing wall movement joints, prepare, prime and re-seal.
- Prepare, prime and seal floor movement joints.
- Any other work deemed necessary by the Engineer for completion of the contract.

B. Construction of Electrical Substation

- Break out and remove existing barrier kerb and dispose at the approved tip.
- Clear and strip site of all vegetation and grassing.
- Excavate overburden material, stockpiled on the site, down to natural ground level.
- Excavate topsoil for stockpile and disposal.
- Excavate foundation trenches and place and compact stone layer.
- Construct R.C foundation strip footings and cable trench foundation.
- Construct foundation brickwork in NFX bricks for the building and cable trench.
- Lay stormwater pipe from cable trench and construct soak pit.
- Backfill under floor slab and form earth fill and embankment externally around building.
- Apply soil poison and place and compact stone layer under floor slab.
- Lay pvc waterproof sheet and place R.C floor slab.
- Construct all brickwork to roof level in NFP bricks internally and facebrick externally.
- Construct R.C. roof slab with screed to falls and apply torch-on waterproofing.
- Install gms doors.
- Install electrical sleeves, conduits, wiring, lighting, power points, earth bars and DB.
- Modify existing stormwater inlet to receive C.I grating.
- Construct P.C kerbing and lay P.C pavers.
- Construct layer works for roadways and lay asphalt paving.
- Reinstatement of topsoil.
- Any other work deemed necessary by the Engineer for completion of the contract.

C3.2: PROJECT SPECIFICATION

PREAMBLE

In the event of any discrepancy between a part or parts of the Standard or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Employer's Agent before the execution of the work under the relevant item.

C3.2.1 GENERAL

PS.1 Preliminary Programme

The Contractor shall include with his tender a preliminary programme on the prescribed form (see T2.2: Preliminary Programme) to be completed by all Tenderers. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

Tenderers may submit tenders for an alternative Time for Completion in addition to a tender based on the specified Time for Completion. Each such alternative tender shall include a preliminary programme similar to the programme above for the execution of the works, and shall motivate his proposal clearly by stating all the financial implications of the alternative completion time.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions (refer to Clause 5.12.2.2) and special non-working days (refer to Clause 5.1.1.1) as specified in the Contract Data.

PS.2 Construction Programme

The Contractor shall within 7 days of the commencement date provide a preliminary but detailed programme showing how he proposes to complete the work.

Penalties as stated in the Contract Data will be applied for late completion of the work and shall be based on the overall value of the Contract.

Program Requirements

The programme shall be structured to cover all items of work conceivable including work to be done by sub-contractors and shall clearly indicate the critical path.

The preliminary programme shall be discussed in detail with the Engineer and the final programme shall be drawn up and submitted within 7 days thereafter. Once submitted, this programme will stand as the official contract programme and shall not be subject to any change whatsoever unless agreed to by the Engineer.

The Contractor shall be required to report on the progress of the work at least once monthly and as such shall undertake to submit a progress report that indicates clearly the progress of the work in relation to the programme of work.

PS.3 ESTABLISHMENT ON SITE / CONTRACTOR'S CAMP SITE / STORE YARD / ENGINEER'S OFFICES AND STORAGE FACILITY

PS.3.1 GENERAL

An area shall be set aside on site (inside the Treatment Works) for use as a campsite for establishment of offices and storage sheds. The contractor shall allow for the suitably sized area to be fenced with lockable gates to accommodate the storage sheds and site offices.

The construction and arrangement of the offices and storage sheds shall be subject to the approval of the Engineer. Sheds for the storage of material that may deteriorate or corrode when exposed to the weather shall be weatherproof, adequately ventilated and provided with raised floors. The Contractor shall take all necessary precautions against damage, fire and theft.

a) Water and Electricity

The campsite area set aside is not currently serviced with water and electricity connections and the Contractor shall be required to liaise directly with the treatment works area engineer concerning use of these services. The Contractor shall be required to connect the water supply for the campsite/ contractor's offices, and ablution facilities to the potable water mains inside the treatment works. The Contractor shall engage the services of a registered plumber for this connection. The costs of the plumber shall be paid by the contractor and sufficient allowance shall be made by the contractor in his tendered rates including de-establishing costs.

The Contractor shall not be charged for the reasonable consumption of water and electricity for the duration of the contract.

Responsibility for getting electricity and water to the various parts of the site, as required, shall rest with the Contractor.

The Contractor shall be responsible for all electrical requirements and consumption within the campsite i.e. offices, lighting, security lighting and small tools. The electrical connection to the Contractor's campsite distribution board shall be made by a registered electrician. The Contractor shall engage the services of this registered electrician after the source of the connection has been established on site. The costs of the registered electrician for the electrical connection shall be paid by the contractor. The contractor shall take cognisance of load shedding imposed by the Eskom and plan accordingly as no claim against this shall be entertained by the client. The contractor shall make allowance for all this in his tendered rates including de-establishing costs.

b) Ablutions for Contractor

The Contractor shall provide separate ablution facilities for his workmen and for his managing site staff. Chemical toilets are acceptable.

These facilities shall be to the approval of the Engineer.

PS.3.2 FACILITIES AND OFFICES FOR ENGINEER AND STAFF

In addition the contractor shall also provide an office for the Engineer for the duration of the contract. The office shall conform to the following standards:

Well ventilated weather proof lockable office with a minimum size of 6m x 4m with a 2.5m ceiling height and fitted with an adequately sized air-conditioner. The office shall be fitted with at least 2 opening windows.

The office shall be fitted with approved office furniture of a suitable and acceptable quality. The minimum provision shall be made for two 1500 x 900 desks, 2 office chairs, lockable steel filing cabinet and 4 suitable visitor's office chairs.

A refrigerator in good working condition of at least 150 litre capacity, a microwave oven in good working condition, of at least 20 litre capacity and tea making facilities comprising an electric kettle, at least 6 cups and saucers, teaspoons as well as sugar, tea, coffee etc. for the duration of the contract, all for the sole use of the Engineer and his staff.

The office shall be weatherproof, have a wooden boarded floor that is at least 150 mm above the ground and shall be provided with a ceiling and lining to the walls or equivalent insulation. The office shall be fitted with an approved type of door with a secure lock and 2 sets of keys.

a) Electricity

The office shall be provided with adequate fluorescent lighting and shall be serviced with 220 volt, 15 amp, 2 phase electrical connection sockets, with at least two separate connection sockets being provided in the Engineer's office.

All electrical connections shall be provided with anti-surge protection and properly earthed and connected to a current overload circuit breaker of the appropriate size.

b) Ablutions

The Contractor shall provide and maintain adequate sanitary facilities for the sole use of the Engineer and his staff. Chemical toilets and a wash hand basin, under cover and on a concreted surface, are acceptable.

PS.4 NOTICE BOARD

A notice board shall not be required for this contract.

PS.5 EXISTING SERVICES

Although every attempt has been made to show existing services on the drawings, the Council cannot guarantee the exact location or number or existence of any service. It is therefore the Contractor's responsibility from the start to prove all existing services shown on drawings or pointed out on site, ahead of any excavation front.

Where a service has been located and exposed, the Contractor shall take every care in ensuring that the excavation containing the service is barricaded and protected against collapse and that the service is adequately protected against damage. Should the existing service become damaged by the Contractor or any third party due to negligence on part of the Contractor, then the cost of its repair along with any consequential costs shall be borne by the Contractor.

In instances where the Contractor has made reasonable efforts to locate a particular service but has been unsuccessful in doing so, the Engineer may instruct for further exploratory holes to be dug in order for the service to be located. Once located, the Contractor shall ensure that the approximate location of the service is marked up on his plans with a full description of the service.

The Contractor shall immediately inform the Engineer if he discovers the existence of any service not shown on the drawings. If such unknown service is undamaged when discovered, it shall from then on be deemed to be a known service with the provisions pertaining to known services above becoming applicable. If such unknown service became damaged when discovered, then the cost of repair shall be borne by the Contractor unless he establishes to the satisfaction of the Engineer that such damage could not by the exercise of reasonable diligence have been avoided.

Finally, should it be necessary to adjust the line, level and / or position of any service not catered for in the contract to enable the construction to proceed, the Contractor shall on no account effect such adjustments, without the prior consent of the Engineer.

PS.6 INTERFERENCE WITH THE OPERATION OF THE TREATMENT WORKS

All operations necessary for the execution of the Works and for the construction of any temporary Works shall, so far as compliance with the requirements of the contract to be carried on so as to cause minimum interference with the operation of the Treatment Works.

This will also require close liaison with the Treatment Works staff which must be maintained at all times whilst work is being carried out on site.

PS.7 CONTRACTOR'S PLANT

The Engineer shall have the right to order the immediate removal from site of any plant which he may deem to be unsatisfactory for the proper execution of the work. The Contractor shall obtain without delay satisfactory plant to replace that removed. Any cost arising out of the removal and subsequent replacement of plant shall be to the Contractor's account.

PS.8 APPROVED TIP

The nearest approved tip is the Municipal tip site at Bisasar Road in Springfield, which is situated approximately 25kms away from the site.

All haulage to this tip site shall be freehaul i.e. tendered rates shall include for overhaul. Unless otherwise specified or agreed to by the Engineer in writing, all materials to be spoiled off site shall be disposed of at this tip site.

Only material, which can be used as cover at the tip, will be accepted free of charge. All other material will be charged at the tariff rate and the Contractor shall make due allowance for such charges in pricing the relevant items for disposal off site.

Cover material will include sand, clay and building rubble less than 500mm in diameter. All other material, including large blocks of concrete and tree trunks, shall be subject to the tariff rate.

PS.9 SECURITY

Although the Treatment Works is fenced, the Contractor shall, for the duration of the contract, provide sufficient security and watchmen to adequately ensure the safety and protection of the works, the Contractor's staff, including subcontractors, and all site plant and construction equipment required for the works.

The Contractor must allow in his establishment costs for the supply and erection of necessary fencing and its subsequent removal upon completion.

The Contractor must also make his own arrangements for the provision of security guards and night watchmen required for the contract.

Site Security, in conjunction with the SAPS (where necessary), shall be responsible for removal of disruptive elements, that may interrupt the progress of the contract through acts such as, but not limited to, intimidation, threats of disruption, violent disruption, or criminal and illegal activity by the local community or independent organisations or entities that may result in slowing down or partial or total stoppage of the works.

Payment for this item shall be made under Section 1, Part AB of the Bill of Quantities.

PS.10 GUARANTEE

Notwithstanding the requirements of Clause 7.8 of the General Conditions of Contract, the Contractor shall guarantee all workmanship and fittings supplied by him and installed under this contract for a period of at least twelve (12) months from date of issue of the Certificate of Completion.

The guarantee shall include any latent defects in the workmanship and fittings any labour or other costs inherent in repairing any defect and ensuring that the workmanship and fittings remain free of defects and in good working order to the satisfaction of the Engineer.

Fair wear and tear shall not be considered as requiring any action by the Contractor under the requirements of the contractual guarantee.

Provision, as required, shall be made by the contractor in the tendered rates, or elsewhere, for any additional costs incurred in providing this contractual guarantee.

PS.11 OCCUPATIONAL HEALTH AND SAFETY

Refer to SANS 1921 - 1:2004 clause 4.14 and Contractors Health and Safety Declaration, in the Returnable Schedules.

PS.11.1 General Statement

It is a requirement of this contract that the Contractor provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end, the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No.85 sans Amended Act No. 181 of 1993, and the OHS Act 1993 Construction Regulations 2014 issued on 7 February 2014 by the Department of Labour.

PS.11.2 Health and Safety Specifications and plans to be submitted at tender stagea) Employers Health and Safety Specification

The Employer's Health and Safety Specification will be included in the tender document, Part C.4.1 Particular Specifications.

b) Tenderer's Health and Safety Plan

The successful Tenderer will be required to submit upon acceptance of his tender, his own documented Health and Safety Plan he proposes to implement for the execution of the work under the contract. His Health and Safety Plan must at least cover the following:

- a proper risk assessment of the works, plant and equipment supplied, risk items, work methods and procedures in terms of Regulations 7 to 28;
- pro-active identification of potential hazards and unsafe working conditions;
- provision of safe working environment and equipment;
- statement of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazard and risk areas (*Regulation 5*)
- monitoring health and safety on the site of works on a regular basis and keeping of records and registers as provided for in the Construction Regulations;
- details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 6 and other applicable regulations; and
- details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the latest Construction Regulations applicable at the time of construction.

The Contractor's Health and Safety Plan will be subject to approval by the Engineer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work or his work will be suspended if he had already commenced work, before he has obtained the Engineer's written approval of his Health and Safety Plan. Such approval by the Engineer shall not relieve the contractor of any of his responsibilities in terms of the contract.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to obtain approval for his safety plan, shall not be used as a reason to claim for extension of time or standing time and related costs.

PS.11.3 COST FOR COMPLIANCE WITH THE OHS ACT CONSTRUCTION REGULATIONS

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Plan and Safety Specification as applicable to this contract.

Should the Contractor fail to comply with the provisions of the Construction Regulations, he will

be liable for penalties as provided in the Construction Regulations and the Employer's Health and Safety Specification.

Further allowance shall be made for the contractor in the tendered rates to ensure that all work undertaken shall only be done after the formal approval of task related risk assessments by the EWS Site Safety Officer. The contractor shall also avail the site management staff for the attendance of regular fortnightly safety meetings as set by the EWS Safety Officer.

PS.12 PROVISIONAL SUM WORK

A provisional sum has been set aside in the Bill of Quantities for:

- Acceptance testing by the Engineer
- Excavate and investigate leak in outfall channel / pipe and carry out in-situ repair to prevent environmental hazard.
- Institutional and Social Development Facilitator.
- Allowance for excepted risks

C3.3: STANDARD SPECIFICATIONS

C3.3.1 The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SABS) in Pretoria.

SANS 1200 A:	General
SANS 1200 C:	Site Clearance
SANS 1200 D:	Earthworks
SANS 1200 DB:	Earthworks (Pipe Trenches)
SANS 1200 DM:	Earthworks (Roads, Subgrade)
SANS 1200 G:	Concrete (Structural)
SANS 1200 HA:	Structural Steelwork
SANS 1200 L:	Medium-pressure Pipelines
SANS 1200 LB:	Bedding (Pipes)
SANS 1200 LC:	Cable Ducts
SANS 1200 LD:	Sewers
SANS 1200 LE:	Stormwater Drainage
SANS 1200 MH:	Asphalt Base and Surfacing
SANS 1200 MJ:	Segmented Paving
SANS 1200 MK:	Kerbing and Channelling
SANS 2001-CM1: 2012:	Masonry Walling
SANS 2001-CC1: 2012:	Concrete Works (Structural)

C3.3.2 AMENDMENTS TO THE STANDARD SPECIFICATIONS

INTRODUCTION

In certain clauses the standard, standardized and particular specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternative or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains additional specifications required for this particular contract.

The number of each clause and each payment item in this part of the project specifications consists of the prefix 'PS' followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or payment item, which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by PS, but followed by a new number which follows on the last clause or item number used in the relevant section of the standard specifications.

PS.D. **EARTHWORKS – SABS 1200 D**

All earthworks for foundations, floor slabs and bulk earthworks shall comply with this specification.

The area of site that the new electrical sub-station shall be built on has been over laid by sandy fill material that is contaminated by sewage screenings. This material shall be excavated, removed and stockpiled on site within a free haul distance of 1km. The contractor shall take all necessary precautions when handling the contaminated material. The contractor shall establish the depth of contaminated material to be removed by taking spot levels on site and comparing them with the spot levels on drawing 59008-1 which shows the natural ground level.

All excess excavated material shall be spoiled on the Treatment Works site as directed by the Engineer.

All imported material are as described under the relevant items in the bill of quantities.

PS.LD **SEWER – SABS 1200 LD**

The stormwater drain shall comply with this specification.

PS.LD.1 **CONCRETE ENCASED PIPE**

The portion of stormwater drain that passes through the building foundation shall be wrapped in 20mm thick polystyrene for the width of the foundation to cushion the pipe against any settlement, and encased in 150mm thick concrete.

The unit of measurement shall be metre (m.) and the rate shall include for labour, plant and materials necessary for the excavation, wrapping in polystyrene and concrete encasement.

PS.LD.2 **SOAK PIT**

A soak pit of size: 1,5m x 1,5m x 1,5m filled with 26mm aggregate, wrapped in Bidim U14 geofabric. shall be constructed. Top of soak pit shall be 500mm below ground level and backfilled and compacted over to natural ground level. Excess excavated material to be spoiled on site.

The unit of measurement shall be number (No.) and the rate shall include for labour, plant and materials necessary for the excavation for and construction of the soak pit.

PS.LE **STORMWATER DRAINAGE – SABS 1200 LE**

PS.LE.1 **MODIFICATION OF EXISTING STORMWATER INLET MANHOLE**

The existing stormwater inlet manhole shall have the precast concrete cover slab and lid removed and disposed at the approved tip site, thereafter the top of the manhole brickwork shall be modified to receive a new cast-in-situ concrete cover slab and heavy duty cast iron grating as detailed on the project drawing.

The unit of measurement shall be number (No.) and shall include the supply of labour, equipment and materials required for the modification of the existing stormwater inlet manhole and disposal of all unsuitable material to the approved tip site.

C3.4: PARTICULAR SPECIFICATIONS

In addition to the Standardized and Project Specifications the following Particular Specifications / Policies shall apply to this contract:

- C3.4.1 Part AH - OSHA 1993 Safety Specification
(26 Pages)
- C3.4.2 Standard Environmental Management Plan for Civil Engineering Construction Works
(24 Pages)
- C3.4.3 Preferential Procurement Regulations, 2022
- PST Concrete Rehabilitation of Low Level Tank 1
- PSB Building Works – New Electrical Substation
- PSE Electrical Works - New Electrical Substation

PST - CONCRETE REHABILITATION OF LOW LEVEL TANK 1**PST.1 REMOVAL OF SEALANT AND JOINT FILLER FROM EXISTING JOINTS****PST.1.1 Wall joints**

The existing joints in the tapered vertical wall (and external earth face) to be stripped of all sealant and joint filler up to 4.5m high to a minimum depth of 20mm and disposed at an approved dump site.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals required to remove the joint sealant and filler from the walls and dispose at an approved tip.

PST.1.2 Floor joints

The existing joints in the tank floor to be stripped of all sealant and joint filler to a minimum depth of 100mm and disposed at an approved tip.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals required to remove the joint sealant and filler from the floor and dispose at an approved tip.

PST .2 CLEANING AND PREPARATION OF CONCRETE SURFACES PRIOR TO FURTHER WORK**PST.2.1 SCOPE**

This specification covers the cleaning and preparation of concrete surfaces prior to the application of repair mortar or surface protection.

PST.2.2 High-pressure water jet

Pro-Struct 101 Biocidal Wash by Stoncor or similar approved shall be used to remove algae and fungal growth and biological deposits on the surface. Pro-Struct 109 Cleaner or Easy Clean Neutral degreaser by Tile and Floor Care or similar approved shall be used in the high-pressure water jet to remove fat, oil, grease, grime and dirt from the surface.

The high-pressure water jet shall be capable of a nozzle pressure of at least 25 000 kPa and deliver at least 16 litre of water per minute. Care shall be taken not to damage the surfaces treated with the high-pressure water jet by Holding the jet too close to the surface being treated.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals required to clean and prepare the tapered concrete wall and floor of the tank including the surfaces of the overflow and outlet boxes, as well as for the removal of all debris to an approved tip, as well as for the drainage of water from and away from structures.

PST.2.3 Identifying de-bonded area of existing sprayed repair concrete layer

The tank walls, wall foundation and overflow / outlet boxes inside surfaces were previously sprayed with a repair concrete layer (approx. 25mm thick) which may have de-bonded in certain areas. The Contractor shall perform a tap test with a metal hammer to identify de-bonded areas and up to 4.5m high in places.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to identify the area of de-bonded sprayed concrete as specified.

PST.2.4 Removal of de-bonded existing sprayed repair concrete layer

The de-bonded area, and up to 4.5m high in places, shall be marked out in conjunction with the engineer and shall be chipped out using hand tools without damaging the concrete substrate.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to mark out and chip out the de-bonded sprayed concrete as specified, as well as for the removal of all debris to the approved tip.

PST.2.5 Preparation of smooth concrete surfaces to be covered by repaired mortar

Smooth concrete surfaces which are to be covered by a repair mortar, and up to 4.5m high in places, shall be roughened with a bush hammer to expose the coarse aggregate to a depth of approximately 5-8 mm. Thereafter, all dust and loose particles shall be removed from the surface with a high-pressure water jet which complies with the requirements of PST.1 in order to produce a sound concrete surface in accordance with the requirements of the manufacturer of the repair mortar.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to prepare smooth concrete surfaces to be covered by repair mortar as specified, as well as for the removal of all debris to an approved tip, as well as for the drainage of water from and away from structures.

PST.3 REHABILITATION OF CONCRETE SUBSTRATE**PST.3.1 Narrow width formwork to tank floor panels**

Narrow width formwork shall be installed to line through with the existing movement joints in the floor. The sprayed repair mortar shall then be placed between the formwork to replicate the existing panel pattern of the tank floor.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the installation and removal of the narrow width formwork.

PST.3.2 Application of sprayed repair mortar

After cleaning and preparation of the concrete surfaces have been completed, a sprayed repair mortar shall be applied to a thickness of 25mm and floated to a wood-floated surface finish to the tank floor and sides of the discharge area at the lowest point to the pump station and to the vertical wall surface for local repairs where identified by the engineer. The sprayed repair mortar shall be a high performance, calcium aluminate mortar specifically designed for the repair and protection of sewer infrastructure from biogenic acid sulphuric acid corrosion, such as "Sika Monotop – 4400 MIC" or "Sewpercoat" or approved equal.

The sprayed repair mortar shall be applied to the tank floor in panels between formwork (formwork measured elsewhere) to coincide with the existing movement joints and the tenderer shall take cognisance of this in his pricing. The products shall be applied strictly in accordance with the manufacturers recommendations and especially when it pertains to the temperature of the concrete substrate and ambient temperature during the day. The tenderer shall supply an extra over price should this work require to be done at night and under cooler conditions in order to prevent delamination of the new repair mortar.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to apply and finish the sprayed repair mortar and to include all necessary flood lighting should this work be undertaken at night.

PST.3.3 Curing of sprayed repair mortar

As soon as the sprayed repair mortar has set sufficiently to prevent surface damage thereto, it shall be cured by applying a manufacturer recommended curing agent or surface hardener and thereafter thoroughly spraying it with water and covering it with a double layer of hessian sheets which shall be kept wet by continually spraying it with water. The hessian sheets shall

be held down with heavy objects and fixed to vertical surfaces to prevent it blowing away. The duration of curing shall be 7 days.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the curing of the sprayed repair mortar.

PST.4 WATERPROOFING TO TOP OF WALLS AND EXTERNAL WALL SURFACES

PST.4.1 Waterproof crack bridging slurry

The excavated exterior perimeter of the tank walls shall be high pressure cleaned as per specification PST.2. The substrate shall be allowed to dry sufficiently prior to applying a waterproof crack bridging slurry, type “Sikalastic 152”, or approved equal, in three layers (each coat of 1mm) to 500mm below the natural ground level of the exterior surface (earthface) of the tank walls and to the top of the walls and 500mm from the top of the walls on the inside surface to overlap the moisture barrier coating. The waterproof crack bridging slurry shall be applied strictly in accordance with the manufacturer’s recommendations and especially when it pertains to the temperature of the concrete substrate and ambient temperature during the day. The tenderer shall price accordingly should this work require to be done at night and under cooler conditions in order to prevent delamination of the crack bridging slurry.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the application of the waterproof crack bridging slurry and to include all necessary flood lighting should this work be undertaken at night.

PST.4.2 Protection of waterproof crack bridging slurry

The freshly applied waterproof crack bridging slurry shall be protected from damp, condensation and water for a minimum of 24 hours and strictly in accordance with the manufacturers recommendations.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the protection of the waterproof crack bridging slurry.

PST.5 ABRASION AND CHEMICAL RESISTANT COATING TO WALLS

PST.5.1 Moisture barrier

After cleaning and preparation of the walls (specification PST.2), the moisture barrier shall be applied by brushing or spraying. “Sikagard 720 Epocem”, or equal approved, shall be applied as the moisture barrier to overall 3mm thickness in two coats to walls and external and internal faces of the overflow and outlet boxes. The tenderer shall allow for finishing at existing movement joints by ruling / cutting of the moisture barrier to create a straight edge at the joints to receive jointing materials (priced elsewhere).

The moisture barrier shall be applied strictly in accordance with the manufacturers recommendations and especially when it pertains to the temperature of the concrete substrate and ambient temperature during the day. The tenderer shall price accordingly should this work require to be done at night and under cooler conditions in order to prevent delamination of the moisture barrier.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the application of the moisture barrier and to include all necessary flood lighting should this work be undertaken at night.

PST.5.2 Protection and curing of the moisture barrier

The first coat shall be allowed to cure as detailed in the manufacturer’s instructions (for approximately 15 hours at 20°C) before application of the second coat. Freshly applied Sikagard 720 Epocem, or approved equal, must be protected from rain, condensation or exposure to surface water for at least 24 hours. After verification that surface moisture is less than 4%, the primer may be applied.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the protection of the moisture barrier.

PST.5.3 Intercoat primer

One coat of Sikafloor 156ZA, or equal approved, shall be applied by roller. Freshly applied Sikafloor 156ZA must be protected from rain, condensation or exposure to surface water for at least 24 hours. The primer must be overcoated by the highly chemical resistant coating in accordance with the manufacturer's instruction, typically not sooner than 16 hours at 20°C and not more than 2 days at 20°C.

The intercoat primer shall be applied strictly in accordance with the manufacturers recommendations and especially when it pertains to the temperature of the concrete substrate and ambient temperature during the day. The tenderer shall price accordingly should this work require to be done at night and under cooler conditions in order to prevent blistering of the primer.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the application of the intercoat primer and to include all necessary flood lighting should this work be undertaken at night.

PST.5.4 Highly chemical resistant coating

Verify that the surface moisture is less than 4% before application of the highly chemical resistant coating. The "Sikagard 63N" highly chemical resistant coating, or equal approved, shall be applied by roller in three coats. The first coat shall be allowed to cure as detailed in the manufacturer's instructions (typically not sooner than 5 hours at 20°C and not more than 2 days at 20°C) before application of the second coat. The second coat shall be allowed to cure as detailed in the manufacturer's instructions. The freshly applied coating must be protected from rain, condensation or exposure to surface water for at least 24 hours.

The coating shall be applied strictly in accordance with the manufacturers recommendations and especially when it pertains to the temperature of the concrete substrate and ambient temperature during the day. The tenderer shall price accordingly should this work require to be done at night and under cooler conditions in order to prevent blistering of the coating.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the application of the highly chemical resistant coating and to include all necessary flood lighting should this work be undertaken at night.

PST.5.5 Protection of the highly chemical resistant coating.

After the third coat of Sikagard 63N, or approved equal, has been applied the surface shall be protected from damp, rain, condensation and exposure to standing water for at least 48 hours and strictly in accordance with the manufacturer's recommendations.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals for the protection of the highly chemical resistant coating.

PST.6 FLEXIBLE JOINT BETWEEN EXISTING STRUCTURAL ELEMENTS

SCOPE

This specification covers the reinstating / forming of a flexible joint between existing structural elements.

PST.6.1 Preparation of joints in the wall

The existing joints, stripped and cleaned as per specification PST.1.1, shall be mechanically reamed out to remove all laitance from surfaces that will come into contact with the new sealant. High pressure water jet joints to remove all dust particles and allow to dry before proceeding to prime. Only high-density backing cord, minimum 130 kg/m³, shall be used and carefully set at the required joint depth in order to provide adequate backing support for the

joint sealant. The concrete surfaces prepared for application of the sealant shall receive a brush coat application of "Sika Primer-3N", or approved equal, in accordance with the manufacturer's instructions.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to prepare and finish the joint and install backing cord and primer.

PST.6.2 Preparation of joints in the floor

The existing joints shall be stripped and cleaned as per specification PST.1.2. Install 10mm thick "Jointex" joint former with 10 x 10 tear-off strip into the existing joint groove and finish flush with the top surface of the newly placed sprayed repair mortar (specification PSC.2). The vertical surfaces of the sprayed repair mortar to come into contact with the sealant shall receive a brush coat application of "Sika Primer-3N", or approved equal, in accordance with the manufacturer's instructions.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to prepare and finish the joint and install joint former and primer.

PST.6.3 Application of joint sealant

The groove shall be masked either side and filled with "Sikaflex PRO-3 i Cure" polyurethane sealant, or approved equal, and the surface thereof shall be finished off smoothly.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to seal the joint with joint sealant as specified as well as finishing off the joint.

PSB: BUILDING WORKS – NEW ELECTRICAL SUBSTATION**PSB.1 SUPPORTING SPECIFICATIONS**

The following standards and codes of practice are referred to in this specification:-

- S.A.B.S.0124 Application of certain soil insecticides for the protection of buildings.
- S.A.B.S.801 Epoxy tar paints.
- S.A.B.S.831 Portland cement 15 and Rapid Hardening Portland Cement 15.
- S.A.B.S.927 Precast concrete kerbs and channels.
- S.A.B.S.952 Polyethylene sheet.
- S.A.B.S.1024 Welded steel fabric for concrete reinforcement.
- S.A.B.S.1090 Sand for plaster and mortar.

PSB.2 SOIL POISONING

Anti-termite soil poisoning shall be by the application of an approved chemical of the chlordane or aldrin type in accordance with S.A.B.S. 1164 or 1165 mixed with water and applied at the rate of not less than 5 litres of solution per m². This work is to be carried out in accordance with Code of Practice S.A.B.S. 0124 by an approved specialist firm at least 36 hours prior to any concrete being laid on the poisoned surface.

Care must be taken to avoid rupture or flooding of the treated surfaces and any such defective areas will require retreatment at the contractor's expense.

PSB.3 POLYTHENE SHEETING

Polythene sheeting shall be manufactured in accordance with S.A.B.S. 952 Type C for floors and Type B for walls.

PSB.4 BRICKWORK**PSB.4.1 GENERAL**

Brickwork is to be carried up regularly in all walls and piers to the heights and thicknesses indicated on the drawings. All bricks must be well wetted before laying, and the course last laid is to be wetted before laying the next course.

All angles and perpendents must be plumb, unless otherwise shown, and all courses shall be kept horizontal. Courses are to be set out using an approved gauge.

Walls are to be carried up evenly so that no part rises more than approximately 1200mm higher than the adjoining walls.

Generally all joints shall be flushed up solid at every course throughout the whole width of each course, unless otherwise specified, and bricks shall all be laid on a solid bed of mortar.

Mortar joints are not to exceed 10mm in thickness, unless otherwise specified.

All joints of walls to be plastered must be raked out as the work proceeds to form a key.

The joints of walls to be bagged shall be formed flush with the brickwork.

Except where required to preserve bond, only whole bricks are to be used.

All openings, reveals, rebates, slits, vents, etc. are to be formed in the brickwork as the work proceeds and not cut out later. Brickwork is to be constructed in stretcher bond U.O.N.

PSB.4.2 CEMENT MORTAR

Sand for mortar shall consist of sands conforming to Table 1 - External Plaster and High Strength Mortar - S.A.B.S. 1090.

All brickwork unless otherwise specified shall be laid in mortar comprising of 5 parts by volume of sand and 1 part by volume of cement (5 : 1).

Cement mortar is to be mixed in small quantities and any mortar which has commenced initial set must not be used.

Sand shall be supplied from a source approved by the Environment Planning and Climate Protection Department of the Ethekewini Municipality and a certificate of approval shall be produced.

PSB.4.3 BRICKS

All bricks shall be supplied by the contractor and shall be approved best quality of the respective type specified.

Non-Facing Extra bricks (NFX) shall be used for all brickwork below damp proof course level except where face bricks are required for the outer face.

All bricks shall be regular in shape, uniform in size and colour, with straight sharp arises and even surface. They shall be thoroughly burnt throughout, free from flaws, stones, cracks and unground lumps and shall conform to the dimensions and tolerances required in SABS 227.

PSB.4.4 BAGGED FACES

Bagged faces of brickwork shall be formed by chipping off projections and rubbing over the surface with sacking dipped in a 4:1 cement grout until all crevices are filled and an even surface is obtained.

PSB.4.5 FACING BRICKS

Facing bricks (FBX) shall be free from defects and shall be built in stretcher bond (U.O.N) to a fair face with true surfaces and angles and jointed in cement mortar with all joints raked out and, unless otherwise specified, pointed to a neat hollow rounded joint.

Facing bricks are to be sorted so that an even mixing of bricks within the colour range of each type occurs and the completed faced walls of the building present an evenly coloured appearance. Any sharply defined patched of varying colours will be required to be rectified at the contractor's expense.

In face brickwork the ends of all bricks shall be fully buttered with mortar throughout their full width so that joints are solid and on no account is subsequent grouting to be relied upon to fill such joints.

PSB.4.6 PROTECTION OF FACINGS

Face brickwork shall be protected from damage during the whole progress of the works and angles, reveals, steps, etc., shall be suitably covered to prevent damage and all damaged work is to be removed and made good to the satisfaction of the Engineer.

PSB.4.7 CLEANING OF FACINGS

Face brickwork shall be cleaned off as the work proceeds and must be protected from soiling by cement splashes, paint, etc., from the subsequent trades by pasting on suitable covering paper which is to be removed on completion and the whole wall cleaned down with an approved brick cleaning solution which must not harm adjoining finishes.

PSB.4.8 BRICKWORK: MEASUREMENT AND PAYMENT

The tenderer should refer to the contract drawings and specification to determine all the incidental brickwork that is required as only the following items will be scheduled:-

- (a) half brick wall - plaster bricks, pressed (NFP or NFX category or equivalent);
- (b) one brick wall - plaster bricks, pressed (NFP or NFX category or equivalent);
- (c) extra over one brick wall for face brick (FBX category or equivalent);
- (d) one brick wall – engineering bricks

The unit of measurement for the above shall be square metre (m²).

The tendered rates for the above shall include for:-

- (i) the supply of all materials together with complying with the requirements of the relevant clauses.
- (ii) all additional costs incurred in providing and laying special bricks, plumbing angles and surfaces, forming of reveals, pointing face brickwork and cleaning on completion; and
- (iii) forming openings for doors and windows.
- (iv) the use of Non Facing Extra bricks (NFX) in place of Non Facing Plastered bricks (NFP) for all brickwork below the damp proof course.

PSB.4.9 BRICKWORK REINFORCEMENT

Brickwork reinforcement shall conform to S.A.B.S 1024 and shall be built into brickwork every fourth course from the foundation upwards.

Notwithstanding the above, additional brickwork reinforcement shall be placed over openings and at eaves level as shown on the drawing.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to build in the brickwork reinforcement.

PSB.5 **DAMP PROOFING****PSB.5.1** POLYTHENE DAMP PROOF COURSE TO WALLS

The damp-proof course to all walls shall be constructed at the levels shown on the contract drawings or as directed, and shall consist of one layer of 375 micron 'Gun-Plas' or other approved embossed polythene sheeting complying in all respects with S.A.B.S. 952, Type B. Only materials bearing the S.A.B.S. mark will be acceptable.

The damp-proof course shall be lapped at least 150mm at junctions and shall be the full thickness of walls in which it occurs.

All damp-proof courses shall be inspected and approved by the Engineer before brickwork is laid above same.

The rate shall be metre (m) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to build in the damp proof course.

PSB.5.2 DAMP PROOF UNDERLAY TO FLOOR SLAB

The 350 micron polythene sheeting shall be laid in one layer using the widest practical widths and with staggered joints. The sheeting shall be laid loosely on the previously levelled and prepared subgrade. The side and end laps shall be joined with 100mm wide proof weld sheeting using special adhesive to manufacturers instructions so as to form a continuous waterproof membrane.

The sheeting shall be carried up between the floor slab and wall up to the wall damp proof course. The membrane shall be stuck to the vertical faces with approved adhesive. All work is to be as indicated on the contract drawings.

The contractor is to take all necessary precautions to prevent damage and puncturing of the sheeting especially during the laying of the floor slab reinforcement and concrete.

The rate shall be square metre (m²) and shall cover the cost of all plant, equipment, support work, materials, labour and all other incidentals to place the damp proof underlay within the required floor area.

PSB.6 PLASTERING

Sand for plaster shall consist of sands conforming to Table 1 - External plaster and high strength mortar of S.A.B.S. 1090.

All plaster work, unless otherwise stated, shall consist of 1 part cement to 5 parts sand, 15mm thick in one coat floated to a smooth finish.

The whole of the plastering shall be executed in the most workmanlike manner, to straight and even surfaces. All internal and external angles are to be perpendicular or level as required, all circular work is to be properly trammed, and all arrises are to be rounded with a 25mm radius.

Every precaution is to be taken to avoid excessive or undue floating and to prevent plaster work from drying too quickly.

All brickwork to be thoroughly wetted before plaster is applied.

All concrete surfaces to be plastered shall be thoroughly hacked to form an adequate key and before plastering the surface is to be well slushed with 2:1 cement paste.

Plaster sand shall be supplied from a source approved by the Environment Planning and Climate Protection Department of the Ethekewini Municipality and a certificate of approval shall be produced.

The unit of measurement shall be square metre (m²).

The tendered rate shall include for:-

- (a) raking out joints in brickwork, hacking of concrete surfaces to form a key, wetting and slushing surfaces with grout;
- (b) the supply and application of plaster to all surfaces as indicated on the contract drawings, includes making good around all items built in and all internal angles of walls.

PSB.6.1 PRELIMINARY TREATMENT OF NEW PLASTER

If necessary on all new walls where traces of free lime or alkali appear, these walls must be neutralised by the application of vinegar or in severe cases by the application of a wash coat compound of 1kg zinc sulphate crystals to 4 litres of water. Prior to painting, all surfaces are to be prepared and all loose particles removed and dusted down. Where walls are to be painted and "sealers" are specified, they are to be approved sealers as recommended by the paint manufacturer for application to plastered walls before painting.

PSB.6.2 THICKNESS

The thickness of plaster applied shall not vary by more than ± 3 mm of the specified thickness.

PSB.6.3 STRAIGHTNESS

The deviation from straightness measured with a 2 000mm straight edge shall not exceed 3mm over the length of the straight edge.

PSB.7 GALVANISED MILD STEEL**PSB.7.1 DOORS AND FRAMES**

The galvanised mild steel doors and frames shall be as manufactured by the principal makers of the standard as derived by the Electricity Department of Ethekewini Municipality and as detailed on the project drawing.

Doors and frames shall be hot-dip galvanised after manufacture to S.A.B.S. 763.

The unit of measurement shall be number (No.) and the tendered rate shall include for all materials, labour and tools required for the complete fabrication and installation of the doors and frames.

PSB.8 ROOFING**PSB.8.1 ROOF SCREED**

The top surface of the concrete roof slab shall be cleaned and prepared to receive a 1:3 cement / sand screed to a wood float finish shaped to falls as shown on the project drawing.

The unit of measurement shall be square metre (m²) and the tendered rate shall include for all materials, labour and tools required for the preparation of the concrete roof slab and placement of the screed to falls.

PSB.8.2 ROOF WATERPROOFING

"Torch on" waterproofing system shall be applied onto the roof screed - type 'Derbigum SP 4' or similar approved with a bitumen based aluminium painted finish, installed strictly in accordance with the manufacturers specification and shall carry a minimum of 10 year guarantee.

The unit of measurement shall be square metre (m²) and the tendered rate shall include for all materials, labour and tools required for the complete installation of the waterproofing system.

PSB.8.2 CAST IRON FULL BORE OUTLET

The cast iron full bore outlet shall be as supplied by Saint-Gobain, or similar approved.

The unit of measurement shall be number (No.) and the tendered rate shall include for all materials, labour and tools required for the complete installation of the cast iron full bore outlet, including all necessary PVC bends and couplings cast into the concrete floor slab of the cable trench, to form a water tight joint.

PSB.9 PAINTING

Stopping is to be carried out with a suitable compound such as "polyfilla" or other similar approved. Exterior grade only to be used.

All materials for paintwork for which S.A.B.S. specifications have been published shall comply with the requirements of such specifications and shall bear the standardisation mark of the S.A.B.S. on the container or packing. Materials for paintwork for which no S.A.B.S. specifications are available shall be of the best quality.

Materials for paintwork shall be delivered to site in unopened containers and applied in accordance with the manufacturer's instructions.

Materials shall be suitable for application to the surfaces concerned. Only materials suitable for external work shall be used externally.

Unless specifically instructed by written direction from or agreed to by the Engineer, no paints are to be thinned but are to be used as supplied by the manufacturer direct from the tins. Where special brands of paint are to be used the manufacturer's "priming" and all

subsequent coats of paint suitable for the particular brand are to be used in accordance with the manufacturer's instructions

Paintwork is to be carried under all furnishings to joinery such as escutcheons, rim locks, etc., the paintwork to be touched up to approval of the Engineer after the final fixing of such furnishings.

The unit of measurement shall be square metre (m²) and shall include for all preparatory work, supply of materials, painting and any touching up and guarantee of paint for a period of 12 months.

PSE: ELECTRICAL WORKS - NEW ELECTRICAL SUBSTATION

PSE.1 GENERAL

The electrical requirements for this building is detailed and specified on the project drawing and the tenderer is responsible for extracting all quantities from the project drawing to enable the full installation of the electrical requirements.

The unit of measurement shall be sum (Sum) and the tendered rate shall include for all materials, labour and tools required for the complete installation of the electrical installation as indicated on the project drawing.

C3.5: CONTRACT AND STANDARD DRAWINGS**C3.5.1 CONTRACT DRAWINGS / DETAILS**

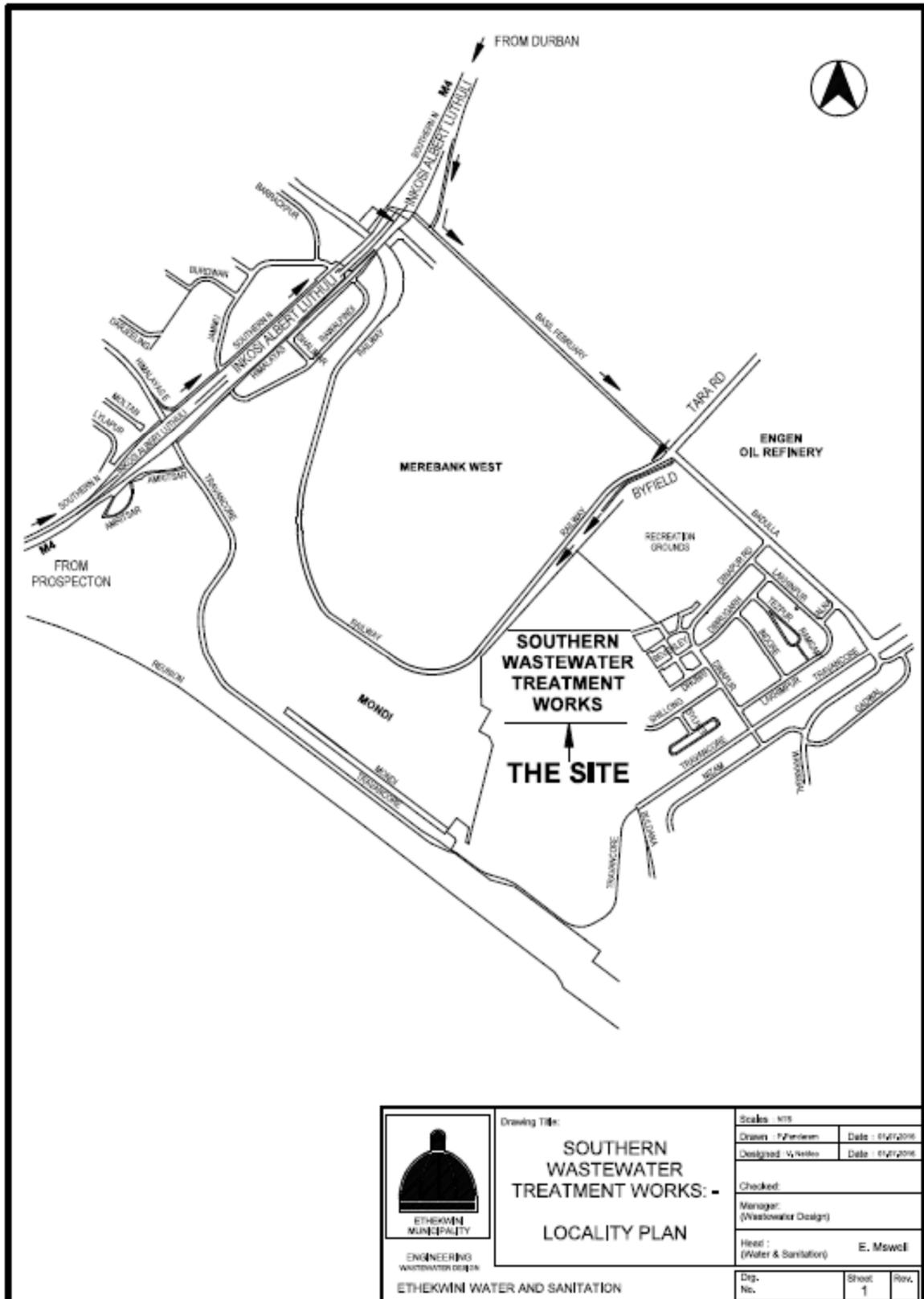
DRAWING No.	DESCRIPTION
60484-1	Rehabilitation to Low Level Tank 1 – Plan and Sections
59008-1	New Substation and Meter Room – Site Layout: Bulk Earthworks and Entrance Paving Details
59008-2	New Substation and Meter Room – Plan, Elevation and Sections
59008-3	New Substation and Meter Room – Building and Reinforcement Details
59008-4	New Substation and Meter Room – Site Plan
MRD – Rev. 2	Meter Room Door – D1
DSSD – Rev. 2	Switch Room Door – D2
SSTD – Rev. 2	Transformer Room Door – D3

C3.6: ANNEXURES

- C3.6.1 Site Specific Health and Safety Specification in Terms of 2014 Construction Regulations 5.1(b)
- C3.6.2 Baseline Risk Assessment
- C3.6.3 Standard Environmental Management Plan for Civil Engineering Construction Works
- C3.6.4 Preferential Procurement Regulations, 2022

PART C4: SITE INFORMATION

C4.1 LOCALITY PLAN



 <p>ETHEKWINI MUNICIPALITY</p> <p>ENGINEERING WASTEWATER DESIGN</p> <p>ETHEKWINI WATER AND SANITATION</p>	Drawing Title:		Scale: 1:100	
	<p>SOUTHERN WASTEWATER TREATMENT WORKS: - LOCALITY PLAN</p>		Drawn: P. Ndlovu	Date: 01/11/2016
			Designed: W. Kete	Date: 01/11/2016
			Checked:	
		Manager: (Wastewater Design)		
		Head: (Water & Sanitation) E. Msweli		
		Dig. No.	Sheet 1	Rev.

C4.2 CONDITIONS ON SITE

There is no specific geotechnical information or other site information.

C4.3 TEST RESULTS

There are no specific test results.